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CONCHOLOGIA ICONICA:

OR,

ILLUSTRATIONS

OF THE

SHELLS OF MOLLUSCOUS ANIMALS.

87967

VOL. XV.

CONTAINING MONOGRAPHS OF THE GENERA

SOLARIUM.	TORNATELLA.	PYRAZUS.
SIGARETUS.	PYRAMIDELLA.	LAMPANIA.
MARGINELLA.	CERITHIUM.	TYMPANOTONOS.
ANCILLARIA.	EULIMA.	LEIOSTRACA.
OVULUM.	VERTAGUS.	NISO.
ERATO.	TELESCOPIUM.	POTAMIDES.
CARINARIA.	CERITHIDEA.	

BY

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"Nothing in his life
Became him like the leaving it; he died
As one that had been studied in his death
To throw away the dearest thing he ow'd
As 'twere a careless trifle."

Shakspeare.

LONDON:

LOVELL REEVE & CO., HENRIETTA STREET, COVENT GARDEN.

1866.

MONOGRAPH

OF THE GENUS

SOLARIUM.

"A natural perspective, that is, and is not."—*Shakspeare*

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6 a

6 b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

SOLARIUM.

PLATE I.

Genus SOLARIUM. *Lamarck.*

Testa subdepressè conoidea, fulvescente-spadicea, fusco variè maculata et zonata, spirâ subobtusâ, anfractibus sex ad octo, angustis, porrectè concolutis, umbilico perampio, perspectivo, columellâ nullâ, aperturâ subquadrangulari, parvâ.

Shell somewhat depressly conoid, fulvous drab, variously spotted and zoned with brown, spire rather obtuse, whorls six to eight, narrow, convoluted in a wide-spread manner, umbilicus very large, perspective, no columella; aperture nearly square, small.

Genus *Solarium* is here restricted to the well-known Linnæan *Trochus perspectivus* and its allies, including four small species, set apart by Dr. Gray as genus *Philippia*, of which the Mediterranean *S. luteum* is the type. Dr. Gray's genus *Torinia*, embracing an interesting series of small species hitherto referred to *Solarium*, will appear as a separate monograph. They will be found to differ in several important particulars from *Solarium* proper, and thus to form a natural group of themselves.

Twenty-one species, four of which it will be seen in the course of our remarks are doubtful, are referred in this monograph to *Solarium*. They are characterized by a more than common uniformity of growth, and even of colour and marking. Composed of from six to eight narrow obliquely quadrangular whorls, convoluted in an unusually wide-spread manner, a very large umbilicus is formed, penetrating to the inner wall of the apex, and the innermost edge of the whorls being conspicuously crenulated throughout, a curiously deceptive spiral line of perspective is presented. The effect is best seen on looking into the umbilicus—the hollow axis of convolution—with the shell held close to a lamp or to the flame of a candle. The predominant colour of the shell of *Solarium* is a yellowish or creamy-drab, and the marking consists of bands, spots, and dots, of reddish-chestnut or brown.

The animal of *Solarium*, which is furnished with a horny operculum, partakes of the character of *Trochus* and *Turbo*, and has the collar of the mantle reflected as in those genera, but the head, instead of being shaped like a proboscis, is prolonged into two elongated tentacles, somewhat after the manner of *Buccinum* and *Purpura*. The region of the Islands of the Eastern Archipelago is the principal seat of habitation of the species, two, if not three of which range to Australia. It is doubtful whether there is any *Solarium* peculiar to Australia. A small species, a very distinct one, *S. oxytropis*, recorded from New Caledonia, does not appear to have been collected elsewhere. *S. cingulum* and *modestum* are common to the Philippine Islands, and to the Society and Sandwich Islands; and a small abnormal species, *S. luteum*, inhabiting the Mediterranean, the only extratropical species, unless one or two extend southwards beyond that limit, is found, like *Zizyphinus conuloides*, in Australia also. The *Solaria* of the New World are limited to a characteristic type, represented in tropical America by *S. granulatum*, *verrucosum*, and *quadriceps* of Panama, Mexico, and the West Indies, and *S. placentale* of the Bay of Magdalena, California.

Species 1. (Mus. Cuming.)

SOLARIUM PERDIX. *Sol. testâ depressè conoideâ, tenui, lævigatâ, pallidâ, anfractibus subtumidis, superne cingulo unico divisis, ad spiram minutè plicato-striatis, ad peripheriam angulatâ, tricarinatâ, carinâ mediâ prominente, majore crenulatâ, cingulo et carinis maculis rufis subquadratis ornatis, umbilico modicè patulo, crenulis parvis albis marginato.*

THE PARTRIDGE SOLARIUM. Shell depressly conoid, thin, smooth, pale, whorls rather swollen, divided at the upper part by a single belt, minutely plicately striated at the spire, angled and three-keeled at the periphery, middle keel prominent, the larger crenulated, belt and keels ornamented with somewhat square red spots, umbilicus moderately open, margined with small white crenules.

HINDS, Pro. Zool. Soc. 1844, p. 22. Moll. Voy. Sulph. p. 50. pl. 14. f. 3, 4.

Hab. Malacca, Ceylon, North-West Australia.

A light and rather pale species, in which the red-brown spots are comparatively feeble and rather distant. The crenules of the periphery keel and of the margin of the umbilicus are conspicuous for their delicate pearl-like character.

Species 2. (Mus. Cuming.)

SOLARIUM PICTUM. *Sol. testâ subdepressè conoideâ, par-*

purascente-spadiceâ, anfractibus supernè et infernè bicingulatis, cingulis rufo-castaneo subremotè articulatis, spiræ anfractibus conspicuè obliquè plicatis et crenatis, basi pallidâ, maculis paucis, distantibus, subinconspicuis, umbilico validè crenulato, crenulis albis.

THE PAINTED SOLARIUM. Shell rather depressly conoid, purple-fawn, whorls two-belted above and below, belts rather distantly articulated with reddish-chestnut, whorls of the spire conspicuously obliquely plicated and crenated, base pale, spots few in number, distant, inconspicuous, umbilicus strongly crenulated, crenules white.

PHILIPPI, Zeitschr. für Malak. 1848, p. 171; Kust. Conch. Cab. Sol. p. 15. pl. 3. f. 2.
Solarium fragile ?, Hinds.

Hab. North coast of New Guinea (in seven fathoms, sand); Hinds.

This comes near to *S. purpuratum*, but whereas the upper and lower parts of the whorls in that species are coloured with blotches inclined to form longitudinal streaks, here they take the form of unusually distant transverse articulations, and the corresponding difference is especially obvious on the base of the shell. Mr. Hinds's name, *S. fragile*, has priority, but it represents only a young and doubtful state of the species, and the precise habitat is equally doubtful.

Species 3. (Mus. Cuming.)

SOLARIUM CUMINGII. *Sol. testâ modicè conoideâ, lividolutescente fulvo-castaneo fasciatâ, in anfractu ultimo obliquè quadrato-strigatâ, anfractibus obliquè plicatis et crenulatis, sulcis spiralibus decussatis, basi rufo exiliter articulatâ, umbilico parvisculo, crenulis rufofusco marginatis.*

CUMING'S SOLARIUM. Shell moderately conoid, livid yellowish, banded with fulvous chestnut, on the last whorl obliquely somewhat squarely streaked, whorls obliquely plicated and crenulated, decussated with spiral grooves, base lightly articulated with red, umbilicus rather small, crenules edged with reddish brown.

HANLEY, Pro. Zool. Soc. 1862, p. 204.
Hab. —— ?

This species, described by Mr. Hanley from a single specimen in Mr. Cuming's collection, I suspect to be an immature variety of *S. fuliginosum*.

Species 4. (Mus. Cuming.)

SOLARIUM MAXIMUM. *Sol. testâ modicè conoideâ, fulvospadiceâ, anfractibus spiraliter lineari-sulcatis, ad spiram obliquè plicato-striatis, supernè plicato-crenatis, castaneo-rufo maculatis, ad peripheriam bicingulatis et maculatis, umbilico amplo, margine crenulato parum colorato.*

THE VERY LARGE SOLARIUM. Shell moderately conoid, fulvous-fawn, whorls spirally linearly grooved, obliquely plicately striated at the spire, plicately crenated and spotted with chestnut-red at the upper part, two-belted and spotted at the periphery, umbilicus large, crenulated margin but little coloured.

PHILIPPI, Zeitschr. für Malak. 1848, p. 170; Kust. Conch. Cab. *Sol.* p. 6. pl. 1. f. 2, 3.
Solarium Taylori, Hanley.

Hab. Java, Ceylon.

Compared with its nearest ally, *S. trochleare*, it will be found that this species differs amongst other characters in being spirally encircled with linear grooves, in being more copiously obliquely plicately striated, and in not having any coloured belt below the spotted puckered margin next the suture.

Species 5. (Mus. Cuming.)

SOLARIUM PURPURATUM. *Sol. testâ conoideâ, anfractibus subtumidis, ad spiram obliquè plicatis, supernè sulcis duabus cinctis, maculis rufo-fuscis subgeminis ornatis, medio pallidè cinereâ, ad peripheriam carinatâ, articulatè maculatâ, ad basin rufo radiatim strigatâ, umbilico subpatulo, crenulis fuscescentibus marginato.*

THE PURPLE-STAINED SOLARIUM. Shell conoid, whorls rather swollen, obliquely plicated at the spire, encircled round the upper part with two grooves, ornamented with doubled red-brown spots, pale-ash in the middle, keeled, and articulately blotched at the periphery, radiately streaked with red-brown at the base, umbilicus rather open, margined with pale-fuscous crenules.

HINDS, Pro. Zool. Soc. 1844, p. 25. Moll. Voy. Sulph. p. 49. pl. 14. f. 1, 2.
Solarium stellatum, Philippi.
Hab. Moluccas.

Marked in a characteristic manner next the suture with duplicated blotches of colour, and at the base with radiating streaks.

Species 6. (Fig. *a*, *b*, Mus. Cuming.)

SOLARIUM FULIGINOSUM. *Sol. testâ latè conoideâ, lividoalbidâ, maculis oblongo-quadratis fuligineo-fuscis marginatâ et conspicuè obliquè tessellatâ, anfractibus inferioribus lævigatis, ad spiram obliquè plicatis, ad peripheriam carinatis et articulatè cingulatis, ad basin nitidè articulatis, umbilico subpatulo, crenulis validis rufo-fuscis marginato.*

THE DUSKY SOLARIUM. Shell broadly conoid, livid-white, margined and conspicuously obliquely tessellated with oblong-square dusky-brown blotches, lower whorls smooth, obliquely plicated at the spire, keeled and articulately belted at the periphery, neatly articulated at the base, umbilicus rather open, margined with strong red-brown crenules.

HINDS, Pro. Zool. Soc. 1844; p. 158.
Solarium maculatum, Reeve.
Solarium Hanleyi, Sowerby.
Hab. ——?

Conspicuously distinguished by its ornamental painting of oblique oblong square blotches of colour. *S. Hanleyi*, described from the single specimen represented at Fig. 6 *a*, is a young shell in which the spire is abnormally depressed, and the base, by a correlation of growth, made convex.

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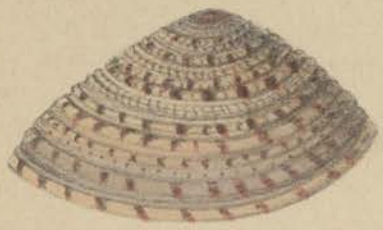

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11 a.

11 b.

12.

Sowerby, del et lith.

Vincent Brooks, Imp

SOLARIUM.

PLATE II.

Species 7. (Mus. Cuming.)

SOLARIUM GRANULATUM. *Sol. testâ conoideâ, lutescente-carneâ, livido-purpureo tinctâ, maculis punctisque castaneo-rufis distantibus sparsim cingulatâ, anfractibus spiraliter sulcatis et granoso-verrucatis, basi multicrenatâ, umbilico parviusculo.*

THE GRANULATED SOLARIUM. Shell conoid, yellowish flesh-colour, stained with livid-purple, sparingly belted with distant chestnut-red spots and dots, whorls spirally grooved and granosely warted, base many-crenated, umbilicus rather small.

LAMARCK, Anim. sans vert. vol. ix. p. 98.

Hab. Mexico.

It is much to be doubted whether this and the following are not varieties of one and the same species. The characters noted as distinctive characters are of very questionable importance.

Species 8. (Mus. Cuming.)

SOLARIUM VERRUCOSUM. *Sol. testâ depressè conoideâ, lutescente-lacteâ, subopacâ, maculis parvis punctisque castaneo-rufis distantibus sparsim cingulatâ, anfractibus spiraliter excavato-sulcatis, versus apicem granoso-verrucatis, verrucis interdum duplicibus, basi multicrenatâ.*

THE WARTY SOLARIUM. Shell depressly conoid, yellowish cream-colour, rather opake, sparingly belted with distant small chestnut-red spots and dots, whorls spirally excavately grooved, granosely warted towards the apex, warts sometimes duplex, base many-crenated.

PHILIPPI, Zeitschr. für Malak. 1848, p. 172; Kuster, Conch. Cab. *Sol.* pl. 2. f. 5, 6.

Solarium nobile, Hanley.

Hab. West Indies.

Compared with *S. granulatum*, the specimens assigned to which are conoid, more or less stained with livid purple, *S. verrucosum* is rather depressed and of an opake yellowish cream-colour.

Species 9. (Mus. Cuming.)

SOLARIUM LÆVIGATUM. *Sol. testâ conoideâ, cinereo-albâ, rosaceo-purpurascente tinctâ, maculis punctisque aurantio-fuscis aspersâ, anfractibus undique spiraliter lineari-sulcatis, lævibus, ad peripheriam bicinctis, versus apicem obliquè crenulatis, basi pallidè aurantio-fusco aspersâ.*

THE SMOOTH SOLARIUM. Shell conoid, ash-white, stained with pinkish-purple, sprinkled with orange-brown spots and dots, whorls spirally linearly grooved throughout, smooth, two-belted at the periphery, obliquely crenulated towards the apex, base sprinkled with pale orange-brown.

LAMARCK, Anim. sans vert. vol. ix. p. 98.

Hab. Kurrachee, mouth of the Indus.

Readily distinguished by its comparatively smooth, linearly-grooved surface, and peculiar pinkish-purple colouring.

Species 10. (Mus. Cuming.)

SOLARIUM TROCHLEARE. *Sol. testâ convexo-conoideâ, luteo-spadiceâ, anfractibus lævibus, versus apicem obliquè crenulatis, superne et infernè rufo-castaneo bicinctis, umbilico amplo, margine fusco tincto.*

THE PULLEY-LIKE SOLARIUM. Shell convexly conoid, yellowish-fawn, whorls smooth, obliquely crenulated towards the apex, two-belted above and below with reddish-chestnut, umbilicus large, margin stained with brown.

HINDS, Pro. Zool. Soc. 1844, p. 25.

Hab. Philippine Islands.

From *S. maximum*, which this species so closely resembles in general aspect, *S. trochleare* may be distinguished by its smoother and more convex form, and double belt of colour beneath the suture, with the absence of any spiral linear groove.

Species 11. (Fig. *a*, *b*, Mus. Cuming.)

SOLARIUM PERSPECTIVUM. *Sol. testâ conoideâ, nunc elevatiusculâ, nunc depressâ, albidâ, livido-plumbeo plus minus tinctâ, nigricante-castaneo latè zonatâ et articulatâ, anfractibus medio lævibus, superne et infernè spiraliter lineari-sulcatis, undique obliquè subremotè impresso-striatis, basi et margine umbilici nigricante-fusco articulatis.*

THE PERSPECTIVE SOLARIUM. Shell conoid, sometimes

rather elevated, sometimes depressed, whitish, more or less stained with livid lead-colour, broadly zoned and articulated with dark chestnut, whorls smooth in the middle, spirally linearly grooved above and below, obliquely rather distantly impressly striated throughout, base and margin of the umbilicus articulated with dark-brown.

Trochus perspectivus, Linnæus, Syst. Nat. p. 1227.

Solarium formosum, Hinds.

Solarium zonatum, *australe*, and *incisum*, Philippi.

Hab. Amboyna; Australia.

This species presents a darker, more decided spiral zone of colour than any other, and the ground-tint is of a more sickly ash-white, passing into a livid lead hue.

Mr. Hinds' *S. formosum* is a more than usually conoid form of the species, richly banded and marked.

Species 12. (Mus. Cuming.)

Solarium modestum. *Sol. testâ depressè conoideâ, cinereo-albâ, livido-fulvescente tinctâ, nigricante-castaneo remotè bizonatâ, anfractibus lævibus, superne et inferne lineari-sulcatis, versus apicem obliquè impresso-striatis, basi pallidâ, vix immaculatâ, margine umbilici opaco-eburneo.*

The modest Solarium. Shell depressly conoid, ash-white, stained with livid-fulvous, distantly two-zoned with dark chestnut, whorls smooth, linearly grooved above and below, obliquely impressly striated towards the apex, base pale, almost unspotted, margin of the umbilicus opake ivory-white.

Philippi, Zeitschr. für Malak. 1848, p. 171.

Hab. China; Society Islands.

Probably a variety of the preceding species, in which the upper zone of colour is not so broad and the lower zone not articulated. The crenulated margin of the umbilicus is, moreover, opake ivory-white.

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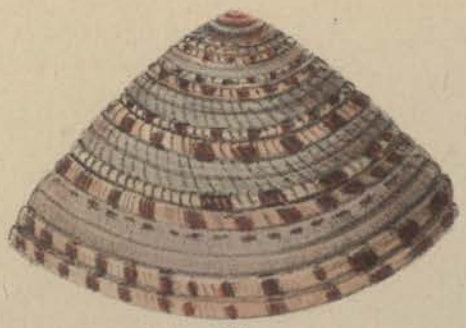

18 b.

19.

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Sowerby, del et lith.

Vincent Brooks, Imp.

SOLARIUM.

PLATE III.

Species 13. (Mus. Taylor.)

SOLARIUM PLACENTULA. *Sol. testâ discoideâ, pallidè fulvâ, lævigatâ, spirâ valde depressâ, anfractibus planulatis, ordinatè spiraliter striatis, ad peripheriam obtusè unicarinatâ, basi subtumidâ, umbilico amplo, margine subremotè crenato.*

THE LITTLE CAKE SOLARIUM. Shell discoid, pale fulvous, smooth, spire very depressed, whorls flat, regularly spirally striated, obtusely one-keeled at the periphery, rather swollen at the base, umbilicus large, margin rather distantly crenated.

HINDS, Pro. Zool. Soc. 1844, p. 22; Moll. Voy. Sulph. p. 50. pl. 14. f. 5, 6.

Hab. Bay of Magdalena, California (in seven fathoms, sand); Belcher.

A small, very depressed species, encircled by a more than usually obtuse keel.

Species 14. (Mus. Cuming.)

SOLARIUM LUTEUM. *Sol. testâ subobtusè conoideâ, luteâ, anfractibus declivi-convexis, lævibus, decussatim malleatis, carinis duabus albis rufo-gemmatis ad peripheriam cingulatis, umbilico parvo, parum crenato.*

THE YELLOW SOLARIUM. Shell rather obtusely conoid, yellow, whorls slopingly convex, smooth, decussately malleated, encircled at the periphery with two white red-beaded keels, umbilicus small, but little crenated.

LAMARCK, Anim. sans vert. vol. ix. p. 100.

Philippia lutea, Gray.

Hab. Mediterranean; Australia.

This well-known species, like the equally abundant *Zizyphinus conuloides*, is common to the widely remote waters of the Mediterranean and Australia.

Species 15. (Mus. Cuming.)

SOLARIUM OXYTROPIS. *Sol. testâ discoideâ, livido-albidâ, nitente, rufescente pallidè promiscuè variegatâ et punctatâ, anfractibus lævibus, obsoletè ordinatè striatis, ad peripheriam liratis et unicarinatis, umbilico subamplo, margine calloso-crenato.*

THE NARROW-KEELED SOLARIUM. Shell discoid, livid-white, shining, promiscuously variegated and dotted with faint-red, whorls smooth, obsoletely regularly striated, ridged and one-keeled at the periphery, umbilicus rather large, callously crenated at the edge.

Philippia oxytropis, Adams, Pro. Zool. Soc. 1854, p. 317. *Solarium oxytropis*, Hanley.

Hab. New Caledonia.

Mr. Cuming's specimen of *S. oxytropis* is an immature shell, but it is the young of a very different species with that to which it has been assigned, *S. hybridum*. It is a depressly discoid shell, of light structure, encircled at the periphery with a conspicuous keel, not beaded, but smooth, studded with faint red dots.

Species 16. (Mus. Cuming.)

SOLARIUM REGIUM. *Sol. testâ convexo-conoideâ, subdepressâ, purpurascente-carneâ, maculis punctisque castaneis duplicibus remotè bicinctâ, anfractibus supernè et infernè lineari-sulcatis, ad peripheriam subacutè carinatis, versus apicem granoso-verrucatis, basi pallidâ, margine umbilici opaco-albo.*

THE ROYAL SOLARIUM. Shell convexly conoid, rather depressed, purple flesh-colour, distantly two-belted with duplex chestnut spots and dots, whorls linearly grooved above and below, rather sharply keeled at the periphery, granosely warted towards the apex, base pale, margin of the umbilicus opake-white.

HANLEY, Pro. Zool. Soc. 1862, p. 205.

Hab. —— ?

This shell was selected by Mr. Hanley for publication in his recent monograph of this genus in Mr. Sowerby's 'Thesaurus Conchyliorum,' but accidentally mislaid during its preparation, and not therefore included. The two belts of spots and dots are both characteristically cut through or duplicated by a spiral linear groove.

Species 17. (Mus. Cuming.)

SOLARIUM DUNKERI. *Sol. testâ convexo-conoideâ, fulvescente-spadiceâ, castaneo-rufo profusè articulatè punctatâ et obscurè obliquè nebulatâ, anfractibus lævibus, versus apicem obliquè plicato-striatis, supernè et infernè*

bicarinatis, carinis crenulatis, umbilico parviusculo, margine opaco-albo.

DUNKER'S SOLARIUM. Shell convexly conoid, fulvous-drab, profusely articulately dotted and obscurely obliquely clouded with chestnut-red, whorls smooth, obliquely plicately striated towards the apex, two-keeled above and below, keels crenulated, umbilicus rather small, margin opake-white.

HANLEY, Pro. Zool. Soc. 1862, p. 204.

Hab. Indian Archipelago.

Resembling *S. perdix*, but more conical and more profusely spotted with chestnut-red.

Species 18. (Fig. *a*, *b*, Mus. Cuming.)

SOLARIUM QUADRICEPS. *Sol. testâ subdepressè conoideâ, fulvescente, interdum lividâ, anfractibus spiraliter lineari-sulcatis, ad spiram granoso-verrucatis, supernè et infernè bizonatis, zonis castaneo-rufo grandimaculatis, umbilico validè crenulato, crenulis rufescente-fusco tinctis.*

THE FOUR-ZONED SOLARIUM. Shell rather depressly conoid, fulvous, sometimes livid, whorls spirally linearly grooved, granosely warted at the spire, two-zoned above and below, zones large-spotted with chestnut-red, umbilicus strongly crenulated, crenules tinged with reddish-brown.

HINDS, Pro. Zool. Soc. 1844, p. 23.

Hab. Bay of Panama (in five fathoms, among mud); Belcher.

The young state of this shell is of the same wart-grained type as *S. granulatum* and *verrucosum*, from the same locality (Panama, Mexico, and the West Indies), but it grows to a much larger size, in which the grains gradually become obsolete.

Species 19. (Mus. Cuming.)

SOLARIUM CINGULUM. *Sol. testâ conoideâ, albâ, fasciâ latâ fulvo-rufescente cingulatâ, colore hic illic in lineis obliquis descendente, anfractibus plano-declivibus, lævibus, ad peripheriam biliratis, umbilico parvo, plicato-crenulato.*

THE GIRDLE SOLARIUM. Shell conoid, white, encircled by a broad band of fulvous-red, which descends here and there in oblique lines, whorls flatly sloping, smooth, two-ridged at the periphery, umbilicus small, plicately crenated.

KIENER, Spec. Coq. Viv. *Sol.* p. 6. f. 6 *a*.

Philippia cingulum, Gray.

Hab. Sandwich Islands; Philippine Islands.

The girdle of fulvous-red, with which this species is encircled falls, in a very characteristic manner, into festoons of oblique lines upon a shining ivory-white ground.

Species 20. (Mus. Cuming.)

SOLARIUM REEVEI. *Sol. testâ conoideâ, livido-carneâ, punctis subquadratis aurantio-fuscis profusè aspersâ, anfractibus spiraliter lineari-sulcatis, ad spiram obliquè impresso-striatis, ad peripheriam bicarinatis, umbilico parviusculo.*

REEVE'S SOLARIUM. Shell conoid, livid flesh-colour, profusely sprinkled with somewhat square orange-brown dots, whorls spirally linearly grooved, obliquely impressly striated at the spire, two-keeled at the periphery, umbilicus rather small.

HANLEY, Pro. Zool. Soc. 1862, p. 204.

Hab. Sydney.

This, I suspect, is merely an Australian dwarf variety of *S. lævigatum*, inhabiting the mouth of the Indus.

Species 21. (Mus. Cuming.)

SOLARIUM HYBRIDUM. *Sol. testâ conoideâ, ad basin tumidâ, albidâ, rufescente-aurantio profusè reticulato-nebulatâ, anfractibus convexis, lævibus, nitentibus, ad peripheriam obtusè tricarinatis, umbilico parvo.*

THE HYBRID SOLARIUM. Shell conoid, swollen at the base, whitish, profusely reticulately clouded with reddish-orange, whorls convex, smooth, shining, obtusely three-keeled at the periphery, umbilicus small.

Trochus hybridus, Linnæus, Syst. Nat. p 1228.

Trochus perspectivinnculus, Meuschen.

Philippia hybrida and *Layardi*, Adams.

Hab. Indian and Australian Seas.

Compared with its nearest ally, *S. cingulum*, this common and widely-distributed species is of more swollen proportions, quite convex at the base, more copiously coloured.

SOLARIUM.

	Plate.	Species.
australe, Philippi	II.	11
cingulum, *Kiener*	III.	19
Cumingii, *Hanley*	I.	3
Dunkeri, *Hanley*	III.	17
formosum, Hinds	II.	11
fragile, Hinds	I.	2
fuliginosum, *Hinds*	I.	6
granulatum, *Lamarck*	II.	7
Hanleyi, Sowerby	I.	6
hybridum (*Trochus*), Linnæus	III.	21
incisum, Philippi	II.	11
lævigatum, *Lamarck*	II.	9
Layardi (Philippia), Adams	III.	21
luteum, *Lamarck*	III.	14
maculatum, Reeve	I.	6
maximum, *Philippi*	I.	4
modestum, *Philippi*	II.	12
nobile, Hanley	II.	8
oxytropis (*Philippia*), Adams	III.	15
pictum, *Philippi*	I.	2
perdix, *Hinds*	I.	1
perspectivum (*Trochus*), Linnæus	II.	11
placentula, *Hinds*	III.	13
purpuratum, *Hinds*	I.	5
quadriceps, *Hinds*	III.	18
Reevei, *Hanley*	III.	20
regium, *Hanley*	III.	16
stellatum, Philippi	I.	5
Taylori, Hanley	I.	4
trochleare, *Hinds*	II.	10
verrucosum, *Philippi*	II.	8
zonatum, Philippi	II.	11

MONOGRAPH

OF THE GENUS

SIGARETUS.

"The merciful and gracious Lord hath so done his marvellous works, that they ought to be had in remembrance."—*David.*

1a.

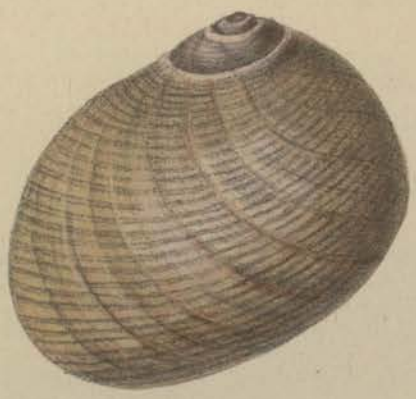
2.a.

2.b.

3.a.

4.a.

4.b.



3.a.

5.a.

5.b.

1.b.*

Sowerby, del. et lith.

Vincent Brooks, Imp.

SIGARETUS

PLATE I.

Genus SIGARETUS, *Adanson.*

Testa depressè orbicularis vel auriformis, nunquam umbilicata, spirâ parvâ, brevi, interdum plano-immersâ, anfractibus plerumque quatuor, ultimo perampliter inflato, sæpissime spiraliter inciso; aperturâ inflatâ, columellâ tenuè calloso-reflexâ.

Shell depressly orbicular or ear-shaped, never umbilicated, spire small, short, sometimes flatly immersed, whorls generally four, the last very largely inflated, mostly spirally incised; aperture inflated, columella thinly callously reflected.

Sigaretus is a mollusk of comparatively large size, enclosing an ear-shaped shell over the branchial and visceral portion of the body, within the embrace of two capacious lobes of the mantle. The shells are therefore for the most part without colour. In one or two species, where the shell is large and less enveloped by the animal, it partakes of an ash-brown colour, tinged with livid-violet towards the apex, and is covered by a thin, horny epidermis. The only kind of sculpture which the shell presents is in the form of spiral, ridge-like striæ, mostly incised in the interstices.

Between thirty and forty species of *Sigaretus* have been described, but as far as my own observations go, I cannot define more than the following twenty-six, including *Sigaretus papilla* and its allies, contained in Pl. IV. and V., an umbilicated form of the genus, of which a separate group has been constituted with the title *Naticina*.

Of the sixteen *Sigareti* proper, the largest and most conspicuous species, *S. concavus*, is a native of the shores of Peru; this, and four species of smaller size inhabiting the West Indies and southern shores of North America, being all that have been collected in the western hemisphere. The remaining eleven species, inhabiting the eastern hemisphere, are distributed as follows. Six are natives of the islands of the Eastern Archipelago, two are from Malacca, two from Australia and Tasmania, and one, the original *Sigaret* of Adanson, from West Africa, this last species being of the same solid, subglobose type as the Peruvian *S. concavus*. The *Naticina* species range from Japan to Australia and New Zealand.

Species 1. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS LEVIGATUS. *Sig. testâ ovatâ, convexo-depressâ, spirâ vix exsertâ, anfractibus subventricosis, spiraliter undato-striatis, striis subprominentibus, concentricè arcuato-plicatis; semipellucido-albâ.*

THE SMOOTH SIGARETUS. Shell ovate, convexly depressed, spire scarcely exserted, whorls rather ventricose, spirally wave-striated, striæ rather prominent, concentrically arcuately plicated; semitransparent-white.

RECLUZ, Illus. Conch. Sig. p. 16. pl. 3. f. 9, 10.

Hab. Island of Luzon, Philippines (in sandy mud, at a depth of seven fathoms); Cuming.

A semitransparent, concavely depressed shell, in which the spiral striæ have almost the force of ridges, and are prominently waved.

Species 2. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS MARTINIANUS. *Sig. testâ orato-auriformi, convexè curvatâ, solidiusculâ, spirâ parvâ, parum exsertâ, anfractibus circa spiram concavo-impressis, spiraliter undato-striatis, striis plus minus obsoletis, concentricè irregulariter plicato-corrugatis; rufescente-fuscâ.*

MARTINI'S SIGARETUS. Shell ovately ear-shaped, convexly curved, rather solid, spire small, but little exserted, whorls concavely impressed round the spire, spirally wave-striated, striæ more or less obsolete, concentrically irregularly plicately wrinkled, reddish-brown.

PHILIPPI, Abbild. und Besch. Conch. vol. i. p. 144. Sig. pl. 1. f. 5.

Hab. Island of St. Thomas, West Indies.

Distinguished from all other species of the genus by its peculiar red-brown colour. M. Recluz regards it as a variety of *S. maculatus*, but the shell is different in form, concavely impressed around the spire, more ear-shaped and more strongly plicately wrinkled.

Species 3. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS CONCAVUS. *Sig. testâ globoso-auriformi, obtusè conicâ, spirâ parum exsertâ, anfractibus declivi-ventricosis, spiraliter plano-liratis, liris latis, interstitiis angustis, incisis, epidermide plus minus indutis; cinereo-fuscescente, spirâ livido-violaceâ, intus nitente rufescente-castaneâ.*

The concave Sigaretus. Shell globosely ear-shaped, obtusely conical, spire but little exserted, whorls slopingly ventricose, spirally flatly ridged, ridges broad, interstices narrow, incised, more or less covered with an epidermis; ash-brown, spire livid-violet, shining reddish-chestnut in the interior.

Lamarck, Anim. sans vert. vol. 9, p. 10.

Sigaretus Grayi, Deshayes.

Sigaretus cymba, Menke.

Sigaretus maximus, Philippi.

Hab. Bay of Callao, Peru (on a sand-bank, and at a depth of five fathoms); Cuming.

I do not participate in the opinion of M. Recluz and M. Deshayes that this well-known species, the largest of the genus, was incorrectly figured by Mr. Sowerby in his 'Genera of Shells' as Lamarck's *S. concavus*. It is the only species of the genus inhabiting the locality to which Lamarck assigns it.

Species 4. (Fig. *a*, *b*, Mus. Cuming.)

Sigaretus haliotoideus. *Sig. testâ obliquè subglobosâ, spirâ obtusè conicâ, modicè exsertâ, anfractibus declivi-ventricosis, circa spiram depressiusculis, spiraliter lineari-liratis, epidermide tenui indutis; sordidè fuscescente.*

The Haliotis-like Sigaretus. Shell obliquely subglobose, spire obtusely conical, moderately exserted, whorls slopingly ventricose, rather depressed around the spire, spirally linearly ridged, covered with a thin epidermis; dull-brown.

Helix haliotoidea, Linnæus, Syst. Nat. 10th edit. p. 775.

Le Sigaret, Adanson.

Bulla velutina, Müller.

Sigaretus haliotoideus, Lamarck.

Hab. Mouth of the Gambia, West Africa.

Here again the habitat assists in confirming the correctness of Mr. Sowerby's views in figuring this species in his 'Genera of Shells' as the Linnæan *Helix haliotoideus*, *Le Sigaret*, from Senegal, of Adanson. It is the only West African species of the genus. It is less globose than the preceding species, with the spire more obtusely conical.

Species 5. (Fig. *a*, *b*, Mus. Cuming.)

Sigaretus Neritoideus. *Sig. testâ oblongo-auriformi, solidiusculâ, spirâ subterminali, parvâ, anfractu ultimo depressè ventricoso, spiraliter lirato-striato, concentricè constrictè plicato; albidâ, epidermide lutescente indutâ.*

The Nerite-like Sigaretus. Shell oblong ear-shaped, rather solid, spire nearly terminal, small, last whorl depressly ventricose, spirally ridge-striated, concentrically constrictedly plicated; white, covered with a yellowish epidermis.

Helix Neritoidea, Linnæus, Syst. Nat. 12th edit. p. 1250.

Hab. Straits of Malacca.

Of a much less globose form than either of the last two species, generally rather constricted in growth.

6.a.

7.a.

7. b.

8.a.

9a.

9b.

8.b.

10.a.

10.b.

6.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

SIGARETUS.

PLATE II.

Species 6. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS ZONALIS. *Sig. testâ depressè auriformi, tenui, subcorneâ, spirâ parvâ, anfractibus subventricosis, spiraliter obsoletè striatis, concentricè densè tenuè corrugatis; lutescente-albâ, obsoletè rufescente-zonatâ.*

THE ZONED SIGARETUS. Shell depressly ear-shaped, thin, rather horny, spire small, whorls rather ventricose, spirally obsoletely striated, concentrically densely finely wrinkled; yellowish-white, obsoletely red-zoned.

Cryptostoma zonalis, Quoy and Gaimard, Voy. de l'Astrolabe, vol. 2. p. 221. pl. 66 *bis*, f. 1 to 3.

Hab. South Australia and Tasmania.

A light, transparent, horny shell, in which the zone of colour selected to characterize it is but faintly indicated.

Species 7. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS PLANULATUS. *Sig. testâ plano-auriformi, spirâ immersâ, anfractibus parum convexis, spiraliter tenuistriatis, concentricè densè exilissimè corrugatis; albâ, epidermide tenui flavescente indutâ.*

THE FLATTENED SIGARETUS. Shell flatly ear-shaped, spire immersed, whorls but little convex, spirally finely striated, concentrically, densely, very delicately wrinkled; white, covered with a thin yellowish epidermis.

RECLUZ, Illus. Conch. Sig. p. 21. pl. 3. f. 4.

Hab. Island of Luzon, Philippines (in sandy mud, at a depth of about ten fathoms); Cuming. Torres Straits, North Australia.

The spire is in this species flatly immersed, the shell being altogether very depressed, white, delicately sculptured, covered with a thin yellowish epidermis.

Species 8. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS JAVANICUS. *Sig. testâ depressè orbiculari, spirâ vix exsertâ, anfractibus regulariter convexis, concentricè plano-liratis, interstitiis incisis, concentricè modicè plicatis; albâ, versus apicem livido-violaceâ.*

THE JAVA SIGARETUS. Shell depressly orbicular, spire scarcely exserted, whorls regularly convex, concentrically flatly ridged, with the interstices incised, concentrically moderately plicated; white, livid-violet towards the apex.

GRAY, Griffith's Cuv. Anim. King. pl. 41. f. 1. *Sigaretus insculptus*, Adams and Reeve.

Hab. Java. Island of Burias, Philippines (in sandy mud, at the depth of four fathoms); Cuming.

A broad, orbicular species, spirally finely flatly ridged and incised, of a particularly pure white, coloured towards the apex with livid-violet.

Species 9. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS LATIFASCIATUS. *Sig. testâ obliquè globosâ, tenuiculâ, spirâ parvâ, parum exsertâ, anfractu ultimo ventricoso, spiraliter lirato-striato, striis irregularibus, confertis, interstitiis incisis; candidâ.*

THE BROAD-BANDED SIGARETUS. Shell obliquely globose, rather thin, spire small, but little exserted, last whorl ventricose, spirally ridge-striated, striæ irregular, close-set, interstices incised; white.

ADAMS and REEVE, Moll. Voy. Samarang, p. 25. pl. 13. f. 11.

Hab. Eastern Seas.

This species, of which Mr. Cuming possesses two or three specimens, approaches nearest to the West African *S. Neritoideus*, but it is of a lighter whiter substance, and more ventricose in form.

Species 10. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS DELESSERTII. *Sig. testâ depressè auriformi, spirâ parvâ, subimmersâ, anfractibus plano-convexis, spiraliter plano-liratis, liris plus minusve obsoletis, concentricè rudè plicato-corrugatis; cinereo-albâ, livido-fuscescente obscurè interruptè fasciatâ, apice livido-violaceo.*

DELESSERT'S SIGARETUS. Shell depressly ear-shaped, spire small, nearly immersed, whorls flatly convex, spirally flatly ridged, ridges more or less obsolete, concentrically rudely plicately wrinkled; ash-white, obscurely interruptedly banded with livid brown, apex livid-violet.

RECLUZ, Illus. Conch. p. 21. pl. 3. f. 8.

Hab. Island of Luzon, Philippines (in sandy mud, at the depth of seven fathoms); Cuming.

The colouring of this species is characteristic, though only faintly indicated.

11.

12.a.

12.b.

13.a.

14.a.

14.b.

13.b.

15.a.

15.b.

16.

SIGARETUS.

PLATE III.

Species 11. (Mus. Cuming.)

SIGARETUS INCISUS. *Sig. testâ depressissimè ovatâ, spirâ plano-immersâ, anfractibus spiraliter plano-liratis, liris numerosis, subirregularibus, interstitiis incisis; albâ.*

THE ENGRAVED SIGARETUS. Shell very depressly ovate, spire flatly immersed, whorls spirally flatly ridged, ridges numerous, rather irregular, interstices incised; white.

Hab. Malacca.

This is even a more flatly depressed shell than *S. planatus*, from which it differs essentially in being elaborately sculptured with spiral ridges.

Species 12. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS CUVIERIANUS. *Sig. testâ concavo-ovatâ, spirâ parvâ, subprominulâ, anfractibus subventricosis, liris æquidistantibus undique spiraliter funiculatis; albâ, spirâ carneâ.*

CUVIER'S SIGARETUS. Shell concavely ovate, spire small, rather prominent, whorls somewhat ventricose, spirally corded throughout with equidistant ridges; white, spire flesh-coloured.

RECLUZ, Illus. Conch. Sig. p. 18. pl. 2. f. 2.

Hab. Isle of Panay, Philippines (in soft mud, at a depth of about ten fathoms); Cuming.

Sculptured with more regularity than is usual in the genus, while the apex of the shell has a characteristic tinge of flesh-colour.

Species 13. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS LEACHII. *Sig. testâ latè orbiculari, convexo-depressâ, spirâ subimmersâ, anfractibus subdeclivibus, spiraliter subobsoletè liratis et incisis; albâ, epidermide stramineâ indutâ.*

LEACH'S SIGARETUS. Shell broadly orbicular, convexly depressed, spire rather immersed, whorls slightly sloping, spirally rather obsoletely ridged and incised; white, covered with a straw-coloured epidermis.

GRAY, Sowerby, Genera of Shells, No. 19.

Cryptostoma Leachii, De Blainville.

Hab. West Indies.

A fine, broadly-orbicular species, delicately sculptured with clearly defined though somewhat obsolete flattened ridges.

Species 14. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS MACULATUS. *Sig. testâ concavo-auriformi, spirâ parvâ, partim immersâ, anfractibus circa spiram declivi-constrictis, deinde ventricosis, concentricè plicatis, profusè spiraliter lirato-striatis, striis irregularibus, undulatis; albâ, ferrugineo-fusco plus minus obscurè interruptè maculatâ.*

THE SPOTTED SIGARETUS. Shell concavely ear-shaped, spire small, partially immersed, whorls slopingly constricted round the spire, then ventricose, concentrically plicated, profusely spirally ridge-striated, striæ irregular, finely waved; white, more or less obscurely interruptedly spotted with rust-brown.

SAY, Amer. Conch. pl. 25.

Hab. Florida.

The shells of this genus being all more or less covered by the mantle of the animal, they have seldom any colour or marking. The row of interrupted spots in this species is therefore characteristic.

Species 15. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS AUSTRALIS. *Sig. testâ oblongo-auriformi, spirâ subprominulâ, anfractibus convexis, spiraliter subobsoletè tenuistriatis, concentricè subprofusè plicato-striatis; albâ, rufescente-fusco pallidè tinctâ.*

THE SOUTHERN SIGARETUS. Shell oblong ear-shaped, spire rather prominent, whorls convex, spirally rather obsoletely finely striated, concentrically somewhat profusely plicately striated; white, faintly tinged with red-brown.

HANLEY, 'Young Conchologist's Book of Species,' frontispiece.

Hab. South Australia and Tasmania.

This approaches very near to *S. zonalis*, but differs in form, chiefly in being more constricted around the spire.

Species 16. (Mus. Cuming.)

SIGARETUS PERSPECTIVUS. *Sig. testâ suborbiculari-ovatâ, depressâ, spirâ immersâ, anfractibus plano-convexis, spiraliter plano-liratis et incisis; albâ.*

THE PERSPECTIVE SIGARETUS. Shell somewhat orbicularly ovate, depressed, spire immersed, whorls flatly convex, spirally flatly ridged and incised; white.

SAY, Amer. Conch. pl. 25.

Hab. South Carolina.

Very closely allied to *S. Leachii* of the West Indies, but more coarsely sculptured.

17a.

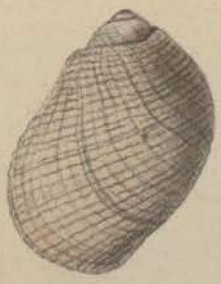
18a.

18b.

19a.

20a.

20b.



19b.

21a.

21b.

17b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

SIGARETUS.

PLATE IV.

Species 17. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS COARCTATUS. *Sig. testâ umbilicatâ, depressè ovatâ, albidâ, epidermide fulvâ indutâ, spirâ parvâ, anfractibus supernè declivi-coarctatis, versus basin tumidiusculis, spiraliter lineari-incisis.*

THE PRESSED SIGARETUS. Shell umbilicated, depressly ovate, whitish, covered with a fulvous epidermis, spire small, whorls slopingly contracted round the upper part, rather swollen towards the base, spirally linearly incised.

Hab. Singapore.

A rather flattened species, the whorls being slopingly contracted round the upper part, rather swollen towards the base.

Species 18. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS TUMESCENS. *Sig. testâ umbilicatâ, suboblongo-ovatâ, tenuiculâ, ventricosâ, albidâ, epidermide tenui fulvâ, spirâ parviusculâ, anfractibus convexo-tumidis, spiraliter lineari-incisis.*

THE SWELLING SIGARETUS. Shell umbilicated, somewhat oblong-ovate, rather thin, ventricose, whitish, with a light fulvous epidermis, spire rather small, whorls convexly swollen, spirally linearly incised.

Hab. ——?

Of a more oblong form than the preceding species, light and ventricose.

Species 19. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS PAPILLA. *Sig. testâ modicè umbilicatâ, oblongo-ovatâ, subauriformi, albidâ, epidermide fulvâ partim indutâ, spirâ brevi, subexsertâ, anfractibus declivi-convexis, spiraliter lineari-incisis, concentricè subrudè plicatis.*

THE NIPPLE SIGARETUS. Shell moderately umbilicated, oblong-ovate, somewhat ear-shaped, whitish, partially covered with a fulvous epidermis, spire short, rather exserted, whorls slopingly convex, spirally linearly incised, concentrically rather rudely plicated.

Nerita papilla, Chemnitz, Conch. Cab. vol. v. p. 285. pl. 189. f. 1939.

Sigaretus papilla, Gray.

Naticina papilla, Recluz.

Hab. Island of Negros, Philippines (on the sands at low water); Cuming.

The spire acquires a nipple-like appearance from being rather exserted, so as to leave a deep suture round it.

Species 20. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS NITIDUS. *Sig. testâ umbilicatâ, semiglobosâ, albidâ, epidermide fulvâ indutâ, spirâ brevi, subprominulâ, anfractibus declivi-convexis, tumidiusculis, spiraliter lineari-incisis.*

THE NEAT SIGARETUS. Shell umbilicated, semiglobose, whitish, covered with a fulvous epidermis, spire short, rather prominent, whorls slopingly convex, rather swollen, spirally linearly incised.

Hab. Island of Ticao, Philippines (on the reefs at low water); Cuming.

A very neat and characteristic species, approaching *S. coarctatus*.

Species 21. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS OBLONGUS. *Sig. testâ profundè umbilicatâ, oblongo-ovatâ, fulvescente, spirâ brevi, subacuminatâ, anfractibus declivibus, deinde convexo-tumidis, concentricè densè filo-striatis.*

THE OBLONG SIGARETUS. Shell deeply umbilicated, oblong-ovate, fulvous, spire short, rather acuminated, whorls sloping, then convexly swollen, concentrically closely thread-striated.

Hab. ——?

The sculpture of this species is quite distinct from that of the preceding. Instead of incised linear grooves, it consists of numerous raised threads.

22.a.

23.a.

23.b.

24.a.

25.a.

25.b.

24.b.

26.a.

26.b.

22.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

SIGARETUS.

PLATE V.

Species 22. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS EXIMIUS. *Sig. testâ vix umbilicatâ, ovatâ, tenui, depressâ, opaco-albâ, spirâ parvâ, anfractibus densè spiraliter funiculatis, interstitiis minutè cancellatis.*

THE DELICATE SIGARETUS. Shell scarcely umbilicated, ovate, thin, depressed, opaque white, spire small, whorls densely spirally corded, interstices minutely cancellated.

Hab. Malacca (in sandy mud at the depth of seven fathoms); Cuming.

Delicately sculptured throughout with fine cord-like ridges, the interstices between which are minutely cancellated.

Species 23. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS PELLUCIDUS. *Sig. testâ profundè umbilicatâ, semiglobosâ, pellucido-albâ, spirâ subobtusâ, anfractibus supernè declivibus, deinde tumidiusculis, spiraliter lineari-incisis, sulcis juxta suturas validioribus.*

THE TRANSPARENT SIGARETUS. Shell deeply umbilicated, semiglobose, transparent-white, spire rather obtuse, whorls sloping round the upper part, then rather swollen, spirally linearly incised, grooves stronger next the sutures.

Hab. Malacca.

A very transparent shell, but yet of rather solid structure.

Species 24. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS PICTUS. *Sig. testâ profundè umbilicatâ, globoso-ovatâ, nitente-albâ, strigis fulvescentibus lentiginosâ, spirâ parvâ, anfractibus declivi-ventricosis, lævibus.*

THE PAINTED SIGARETUS. Shell deeply umbilicated, globosely ovate, shining-white, freckled with fulvous streaks, spire small, whorls slopingly ventricose, smooth.

Hab. Adelaide, South Australia.

Of quite a distinct type from any of the preceding species, smooth shining white, faintly painted with fulvous streaks.

Species 25. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS ARGENTEUS. *Sig. testâ vix umbilicatâ, depressè ovatâ, candidâ, spirâ parvâ, parum exsertâ, anfractibus undique spiraliter liratis et striatis.*

THE SILVER SIGARETUS. Shell scarcely umbilicated, depressly ovate, white, spire small, but little exserted, whorls spirally ridged and striated throughout.

Hab. Australia; Jukes.

Of the same characteristic form as the little *S. eximius* just described, and sculptured in an almost similar manner.

Species 26. (Fig. *a*, *b*, Mus. Cuming.)

SIGARETUS FIBULA. *Sig. testâ umbilicatâ, semiglobosâ, solidiusculâ, albâ, spirâ parvâ, obtusâ, anfractibus supernè declivibus, deinde gibbosiusculis, lævibus, vel obliquè minutissimè striatis.*

THE BUTTON SIGARETUS. Shell umbilicated, semiglobose, rather solid, white, spire small, obtuse, whorls sloping round the upper part, then rather gibbous, smooth, or obliquely very minutely striated.

Hab. ——?

This little species, it will be observed, has no spiral sculpture. It is of solid growth, rather conspicuously umbilicated.

SIGARETUS.

	Plate.	Species.		Plate.	Species.
argenteus, *Reeve*	V.	25	latifasciatus, *Adams and Reeve*	II.	9
australis, *Hanley*	III.	15	Leachii (*Cryptostoma*), Gray	III.	13
coarctatus, *Reeve*	IV.	17	maculatus, *Say*	III.	14
concavus, *Lamarck*	I.	3	Martinianus, *Philippi*	I.	2
Cuvierianus, *Recluz*	III.	12	*maximus*, Philippi	I.	3
cymba, Menke	I.	3	oblongus, *Reeve*	IV.	21
Delessertii, *Recluz*	II.	10	Neritoideus (*Helix*), Linnæus	I.	5
eximius, *Reeve*	V.	22	nitidus, *Reeve*	IV.	20
fibula, *Reeve*	V.	26	papilla (*Nerita*), Chemnitz	IV.	19
Grayi, Deshayes	I.	3	pellucidus, *Reeve*	V.	23
haliotoideus (*Helix*), Linnæus	I.	4	perspectivus, *Say*	III.	16
incisus, *Reeve*	III.	11	pictus, *Reeve*	V.	24
insculptus, Adams and Reeve	II.	8	planulatus, *Recluz*	II.	7
Javanicus, *Gray*	II.	8	tumescens, *Reeve*	IV.	18
lævigatus, *Recluz*	I.	1	zonalis (*Cryptostoma*), Quoy	II.	6

MONOGRAPH

OF THE GENUS

MARGINELLA.

"Great Builder of Mankind, canst thou propound
All this to thy bright eyes, and not confound
Thy handiwork?"—*Quarles.*

1.a.

1.b.

1.c.

2.a.

2.b.

2.c.

1.d.

Sowerby, del. et lith.

Vincent Brooks, Imp.

MARGINELLA.

PLATE I.

Genus MARGINELLA, Lamarck.

Testa oblongo-ovata vel pyriformis, polita, ad basin emarginata, spirâ brevi, interdum immersâ, labro plerumque varicoso-reflexo, aperturâ subangustâ, columellâ plicatâ, plicis sæpissimè quatuor.

Shell oblong-ovate or pear-shaped, polished, emarginated at the base, spire short, sometimes immersed, lip generally varicosely reflected, aperture rather narrow, columella plaited, plaits mostly four in number.

The genus *Marginella* comprises a pretty numerous group of small Volutes, partaking of the characters of the Cowry. As in *Voluta*, the shell is of an oblong-ovate or pear shape, short in spire, with the columella plaited. As in *Cypræa*, the spire is sometimes wholly immersed, and the aperture is extended linearly to the summit, while the outer surface of the shell is highly polished from its contact with the animal. It was shown by Adanson, towards the close of the last century, in his 'Voyage en Sénégal,' that the shell of *Marginella* is enveloped by the mantle of the animal; and M. Deshayes, from observations made on the shores of the Mediterranean, describes the animal as having a thin, capacious disk, reflected over the edge of the shell, with the mantle extending on either side, as in *Cypræa*, into a thin lobe, closing together chiefly behind, so as to leave a narrow opening on the back. Interesting observations were also made on *Marginella* by Mr. Arthur Adams during the voyage of the 'Samarang.' *M. diadochus* was taken alive by him in the Straits of Sunda, and *M. undulata* on the east coast of Africa. His exquisite drawings of the living forms of those species, published in the Zoology of that Voyage, exhibit the mantle partially retracted. It will be seen by these figures that the animal is characterized by a striking variety of marking and brilliancy of colouring, contrasting conspicuously in both instances with the shell.

The small cylindrical species of *Marginella*, of which the shell is mostly of a delicate, transparent substance, and in some specimens quite of glassy tenuity, were separated by Lamarck to form his genus *Volvaria*. Mr. Hinds proposed to separate them as a subgenus, with the title *Volvarina*, using the trinomial form of nomenclature.

Out of a hundred and fifty species, described in the following monograph, the habitats are known of about two-thirds. The great centre of habitation of the genus is West Africa, about Senegal and Cape Blanco. Here dwell five-and-twenty species, comprising all the more striking and beautiful of the genus. *M. glabella*, *Cumingiana*, *Goodalli*, *limbata*, *aurantia*, *bifasciata*, *Adansoni*, *pseudofaba*, *splendens*, *Belcheri*, *nodata*, *Cleryi*, *musica*, and others, extremely diverse in painting and general typical character, are all natives of this locality. East Africa contributes eight species, among which are the beautiful *M. pyrum* and *mosaica*. Four species, including the curiously cylindrical *M. dactylus*, are recorded from the Cape of Good Hope. No more than about a dozen species have been collected in the great area of the eastern archipelago, China, Borneo, and Malacca,—only a single small species, *M. Philippinarum*, being found by Mr. Cuming during his extended researches amongst the Philippine Islands. Tasmania furnishes two small species of a special type, *M. formicaria* and *muscaria;* and Australia eight species, among which are two of singular delicacy and beauty, *M. pulchella* and *De Burghiæ*. Two small species have been lately described from the islands of the Pacific.

Nearly as many species of *Marginella* inhabit the Western as the Eastern Hemisphere, but they are mostly of small size, though the colossal *M. bullata* is among the number. This remarkable species, together with the equally characteristic *M. Largillieri*, *fulminata*, *angustata*, and three others are inhabitants of Brazil. As many as twenty-six are recorded from the West Indies, mostly small, but several of them are beautifully marked; the most noticeable is perhaps *M. muralis*, from the circumstance of its being of the same specific type as the *M. pulchella* and *De Burghiæ* of Australia. Two very beautiful species, *M. labiata* and *cincta*, are from Mexico, and the latter of these is of the same specific type as the *M. marginata* of Senegal. Two species are recorded from Venezuela, one being the very characteristic *M. porcellana*, and three from Honduras. On the western coast of America a solitary species, *M. curta*, occurs at Peru, three at Panama, including the typical *M. prunum* and *sapotella*, and two at California.

The northern limit of the genus in the Eastern Hemisphere is represented by one very small species in the Mediterranean, the Linnæan *M. miliaria*, the range of which extends to Madeira. Montagu, as far back as 1803, described two species, *M. pallida* and *catenata*, as British species, and they were included by subsequent writers, to the time of Forbes and Hanley, in the British fauna; they were shown however by these authors to be natives of the West Indies.

Species 1. (Fig. *a*, *b*, *c*, Mus. Taylor; Fig. *d*, Mus. Cuming.)

MARGINELLA GLABELLA. *Marg. testâ ovato-turbinatâ, subtrigonâ, carneâ vel lividо-purpurascente, obscurè bifasciatâ, albo-floccatâ, ad suturas flammulatâ, spirâ conico-exsertâ, anfractibus supernè declivi-gibbosis, labro calloso-reflexo, sæpe aurantio, aperturâ subpatulâ, columellâ quadriplicatâ.*

THE GLOSSY MARGINELLA. Shell ovately turbinated, somewhat triangular, flesh-coloured or livid-purple, obscurely two-banded, flaked with white, flamed at the sutures, spire conically exserted, whorls slopingly gibbous round the upper part, lip callously reflected, often tinged with orange, aperture rather wide-open, columella four-plaited.

Voluta glabella, Linnæus, Syst. Nat. p. 1189.
Marginella glabella, Lamarck.

Hab. Senegal, West Africa.

This species, in its finest state, is of a rich livid-purple colour, enamelled with orange.

Species 2. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Taylor.)

MARGINELLA BULLATA. *Marg. testâ cylindraceo-ovatâ, subpyriformi, fulvescente-spadiceâ, aurantio-tincta, spirâ immersâ, anfractibus supernè contractis, deindè gibbosiusculis, versus basin attenuatis, labro crassè reflexo, intus obsoletè crenulato, aperturâ curvatâ, columellâ quadriplicatâ.*

THE BUBBLE-SHAPED MARGINELLA. Shell cylindrically ovate, somewhat pear-shaped, fulvous-drab, stained with orange, spire immersed, whorls contracted at the upper part, then rather gibbous, attenuated towards the base, lip thickly reflected, obsoletely crenulated within, aperture curved, columella four-plaited.

Voluta bullata, Born, Mus. Vindob. p. 218.
Marginella bullata, Deshayes.
Marginella Bellangeri, Kiener.

Hab. Brazil.

Lamarck curiously confounded this remarkable species with the little *M. angustata* from the same locality. After describing the small species, and giving its dimensions as ten lines, he adds, "but it appears that it becomes very much larger."

3.a.

4.a.

4.b.

4.c.

5.a.

5.b.

4.d.

6.a.

6.b.

3.b.

Sowerby, del et lith

Vincent Brooks, Imp.

MARGINELLA.

PLATE II.

Species 3. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA BURCHARDI. *Marg. testâ ventricoso-ovatâ, pallidè livido-cinerascente, immaculatâ, spirâ parvâ, anfractibus supernè tumidiusculis, labro calloso-reflexo, columellâ quinque-plicatâ, plicis angustis, prominentibus, constrictis.*

BURCHARD'S MARGINELLA. Shell ventricosely ovate, pale livid ash, unspotted, spire small, whorls rather swollen round the upper part, lip callously reflected, columella five-plaited, plaits narrow, prominent, constricted.

DUNKER, Zeitschr. für Malac. 1852, p. 61.

Hab. East Africa. Nicobar Islands. Ceylon.

An almost colourless species, passing into *M. undulata*.

Species 4. (Fig. *a*, *b*, *c*, *d*, Mus. Cuming.)

MARGINELLA ELEGANS. *Marg. testâ subpyriformi-ovatâ vel oblongâ, solidiusculâ, cinereâ, punctis lineisque brevibus griseis copiosè fasciatâ, labro et columellâ vividè rufo-aurantiis, spirâ brevi, obtusâ, interdum partim occultâ, anfractibus supernè tumidis, labro valde calloso, columellâ quinque- vel sex-plicatâ*

THE ELEGANT MARGINELLA. Shell somewhat pyriformly ovate or oblong, rather solid, ash-coloured, copiously banded with grey dots and short lines, lip and columella bright reddish-orange, spire short, obtuse, sometimes partially concealed, whorls swollen round the upper part, lip very callous, columella five- or six-plaited.

Voluta elegans, Gmelin, Syst. Nat. p. 3448.

Marginella elegans, Kiener.

Hab. East Indies. Nicobar Islands. Straits of Malacca; Dr. Trail.

This very beautiful species is to be recognized by its solid growth and spirally banded colouring, as distinguished from the longitudinally waved colouring of *M. undulata*.

Species 5. (Fig. 5 *a*, 5 *b*, 6 *a*, 6 *b*, Mus. Taylor.)

MARGINELLA UNDULATA. *Marg. testâ ventricoso-ovatâ, cærulescente-cinereâ, griseo tenuè longitudinaliter undulatâ, labro et columellâ rufo-aurantio tinctis, spira parvâ, subimmersâ, anfractibus medio tumidiusculis, labro calloso-reflexo, columellâ quinqueplicatâ, plicis constrictis.*

THE WAVED MARGINELLA. Shell ventricosely ovate, bluish-ash, thinly longitudinally waved with grey, lip and columella tinged with orange-red, spire small, a little immersed, whorls rather swollen in the middle, lip callously reflected, columella five-plaited, plaits constricted.

Voluta glabella undulata, Chemnitz, Conch. Cab. vol. 10. p. 166. pl. 150. f. 1423, 1424.

Marginella undulata, Deshayes.

Voluta strigata, Dillwyn.

Marginella strigata, Kiener.

Hab. East Africa.

Distinguished from the preceding species by its longitudinally-waved pattern of colouring, and lighter, more ventricose growth.

6.a.

7.a.

7.b.

8.a.

9.a.

9.b.

8.b.

10.a.

10.b.

6.b.

Sowerby, del et lith.

Vincent Brooks, Imp.

MARGINELLA.

PLATE III.

Species 6. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA PETITII. *Marg. testâ subpyriformi-ovatâ, solidâ, nitente, albâ, pallidè rubescente-carneo subobliquè promiscuè latè undatâ, punctis fuscis irregularibus plus minus obscurè undique fasciatim piperatâ, spirâ subprominulâ, anfractibus supernè declivi-angulatis, labro incrassato, columellâ quadriplicatâ, aperturâ subpatulâ.*

PETIT'S MARGINELLA. Shell somewhat pyriformly-ovate, solid, shining, white, promiscuously rather obliquely broadly-waved with pale ruddy flesh-colour, more or less obscurely bandedly peppered throughout with irregular brown dots, spire rather prominent, whorls slopingly angled round the upper part, lip thickened, columella four-plaited, aperture rather open.

DUVAL, Revue Zool. Cuv. 1841. p. 278.

Hab. ——?

A most truly delicate and beautiful species, of which there is a specimen in the collection of Mrs. De Burgh even larger than the specimen figured.

Species 7. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA HELMATINA. *Marg. testâ ovatâ, cærulescente-cinereâ, punctis griseis umbratis copiosè aspersâ, maculisque in fasciis duabus distantibus ad apicem lineatâ, spirâ conicâ, anfractibus supernè rotundatis et obscurè plicatis, labro conspicuè reflexo, columellâ quadriplicatâ.*

THE GREY MARGINELLA. Shell ovate, bluish ash-colour, copiously sprinkled with grey-shaded dots, with spots in two distant bands, lineated at the apex, spire conical, whorls rounded and obscurely plicated at the upper part, lip conspicuously reflected, columella four-plaited.

RANG, Mag. de Zool. 1829, class 5. pl. 5.

Hab. Senegal, and Mouth of the Gambia, West Africa.

Distinguished by a copious and characteristic painting of numerous shaded or dashed dots of bluish-grey, passing at the apex into radiating lines.

Species 8. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA CUMINGIANA. *Marg. testâ ovatâ, cærulescente-cinereâ, punctis griseis umbratis, sæpe longitudinaliter undatis, copiosè aspersâ, maculisque in fasciis duabus distantibus, ad apicem lineatâ, spirâ conicâ, anfractibus supernè rotundatis et obscurè plicatis, labro conspicuè reflexo, columellâ quadriplicatâ.*

CUMING'S MARGINELLA. Shell ovate, bluish ash-colour, copiously sprinkled with grey-shaded dots, often longitudinally waved, with spots in two distant bands, lineated at the apex, spire conical, whorls rounded and obscurely plaited at the upper part, lip conspicuously reflected, columella four-plaited.

PETIT, Revue Zool. Cuv. 1841. p. 185.

Hab. Senegal, and Mouth of the Gambia, West Africa.

I adopt this species with reluctance, suspecting it to be merely a large and fine state of the preceding species, *M. helmatina*.

Species 9. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA GOODALLI. *Marg. testâ obtusè pyriformi, rubescente-aurantiâ, maculis niveis rotundatis, subæquidistantibus aspersâ, spirâ abbreviato-conicâ, anfractibus supernè gibboso-angulatis, infernè subrostratis, labro incrassatè reflexo, intus crenulato, columellâ quadriplicatâ.*

GOODALL'S MARGINELLA. Shell obtusely pear-shaped, ruddy orange, sprinkled with almost equidistant, round, snow-white spots, spire shortly conical, whorls gibbously angled round the upper part, somewhat beaked at the lower, lip thickly reflected, crenulated within, columella four-plaited.

SOWERBY, Tankerville Cat. app. p. 30. pl. 2. f. 2.

Hab. Senegal, West Africa.

This very beautiful, and now well-known species, is quite unapproached in character by any other.

Species 10. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA LIMBATA. *Marg. testâ sublatè ovatâ, solidâ, calloso, cærulescente-albâ, fulvo-fuscescente longi-*

tudinaliter lineari-strigatâ, strigis distantibus, interdum undulatis, labro fusco-nigro conspicuè vittato, spirâ parviusculâ conicâ, anfractibus supernè gibbosis, labro calloso-incrassato, columellâ quadriplicatâ.

The bordered Marginella. Shell rather broadly ovate, solid, callous, bluish-white, longitudinally linearly streaked with fulvous-brown, streaks distant, sometimes a little waved, lip conspicuously filleted with fuscous-black, spire rather small, conical, whorls gibbous round the upper part, lip callously thickened, columella four-plaited.

Lamarck, Anim. sans vert. vol. 10. p. 438, Enc. Méth. pl. 376. f. 2 *a*, *b*.

Hab. Mouth of the Gambia, West Africa.

Another very distinct species, especially characteristic in the dark filleted blotching on the reflected edge of the lip.

11.a.

12.a.

12.b.

12.c.

13.a.

13.b.

13.c.

14.a.

14.b.

11.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

MARGINELLA.

PLATE IV.

Species 11. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA PIPERATA. *Marg. testâ subobtusè conicâ, flavescente-cinereâ, maculis parvis punctisque nigris copiosè lentiginosâ, lineis capillaribus cingulatâ, anfractibus supernè gibboso-angulatis, labro incrassato, conspicuè nigro maculato.*

THE PEPPERED MARGINELLA. Shell rather obtusely conical, yellowish ash-colour, copiously freckled with small black spots and dots, encircled with fine hair-lines, whorls gibbously-angled round the upper part, lip thickened, conspicuously spotted with black.

HINDS, Pro. Zool. Soc. 1844. p. 72.

Hab. Natal, East Africa.

Allied to *M. rosea*, but of a more obtusely conical form, plentifully freckled throughout with black spots and dots, while there is a perceptible banding of fine hair-lines.

Species 12. (Fig. *a*, *b*, Mus. Cuming; Fig. *c*, Mus. Taylor.)

MARGINELLA MOSAICA. *Marg. testâ abbreviato-conicâ, albâ, olivaceo-viridi nebuloso-tessellatâ aut vittatâ, spirâ subobtusâ, anfractibus supernè ventricoso-angulatis, labro modicè reflexo; aperturâ subpatulâ.*

THE MOSAIC MARGINELLA. Shell shortly conical, white, cloudedly tessellated or filleted with olive-green, spire rather obtuse, whorls ventricosely angled round the upper part, lip moderately reflected; aperture rather open.

SOWERBY, Thes. Conch. Marg. p. 381. p. 75. f. 58, 59.

Hab. East Africa.

Though bearing a strong general resemblance to *M. pyrum*, this is really a very distinct species. It is of a shorter conical form, more ventricosely angled, with the painting tessellated or disposed in transverse fillets. Besides the two specimens here figured from Mr. Cuming's and Mr. Taylor's collections, there is a particularly fine specimen in the collection of Mrs. De Burgh.

Species 13. (Fig. *a*, *b*, Mus. Taylor; Fig. *c*, Mus. Cuming.)

MARGINELLA PYRUM. *Marg. testâ pyriformi-ovatâ, albidâ, lineis griseis, ad latus umbratis, longitudinaliter interruptè undatis, spirâ prominulâ, anfractibus supernè declivi-angulatis, labro modicè incrassato.*

THE PEAR MARGINELLA. Shell pyriformly-ovate, whitish, longitudinally irregularly interruptedly waved with grey lines, shaded at the side, spire rather prominent, whorls slopingly angled round the upper part, lip moderately thickened.

Voluta pyrum, Gronovius, Zooph. tab. exp. p. 5. pl. 19. f. 13, 14.

Voluta picta, Gmelin.

Marginella nubeculata, Lamarck.

Marginella pyrum, Deshayes.

Hab. East coast of Africa.

This species, better known under Lamarck's name of *nubeculata*, was clearly named *pyrum* half a century before by Gronovius. He did not use the binomial form of nomenclature in the body of his work, but adopted it in his explanation of the plates.

Species 14. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA ROSEA. *Marg. testâ conico-oblongâ, pallidè roseâ vel cinereâ, lineis brevibus nigricantibus, ad latus albo-maculatis sparsim lentiginosâ, spirâ subobtusâ, anfractibus supernè tumido-angulatis, labro modicè incrassato, fusco-nigricante sparsim punctato; aperturâ subpatulâ.*

THE ROSE MARGINELLA. Shell conically oblong, pale-rose or ash-colour, sparsely freckled with short black lines, blotched with white at the side, spire rather obtuse, whorls tumidly angled round the upper part, lip moderately thickened, sparingly dotted with fuscous-blank; aperture rather open.

LAMARCK, Anim. sans vert. vol. 10. p. 438.

Hab. Senegal, West Africa. Cape of Good Hope and Natal, South Africa; Krauss.

The rose-colouring of this species is always very delicate, and often partakes largely of a dull yellowish-ash tone.

15.a.

16.a.

16.b.

17.a.

17.c.

17.d.

17.b.

18.a.

18.b.

15.b.

Sowerby, del. et lith.

Vincent Brooks, Imp

MARGINELLA.

PLATE V.

Species 15. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA NEWCOMBI. *Marg. testâ ovatâ, solidiusculâ, callosâ, flavescente-albâ, rosaceo-cinereo tinctâ et undatâ, punctis nigris undique vittatâ, spirâ subobtusâ, anfractibus supernè gibboso-rotundatis, infernè subcontractis, labro valde incrassato fusco-nigro sparsissimè punctato.*

NEWCOMB'S MARGINELLA. Shell ovate, rather solid, callous, yellowish-white, tinged and waved with pink-ash colour, filleted throughout with black dots, spire rather obtuse, whorls gibbously rounded at the upper part, rather contracted at the lower part, lip much thickened, very sparingly dotted with fuscous-black.

Hab. Lagulhas Bank, Cape of Good Hope.

This shell, which I find in Mr. Cuming's collection with the name *Newcombi* in manuscript, may be said to differ from *M. rosea* chiefly by its more solid, callous growth; it is, however, a doubtful species.

Species 16. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA AURANTIA. *Marg. testâ subangustè ovatâ, vividè carneolo-aurantiâ, punctis albis sparsim lentiginosâ, spirâ subobtusè conicâ, anfractibus convexis, labro calloso-incrassato.*

THE ORANGE MARGINELLA. Shell rather narrowly ovate, bright carnelian-orange, sparingly freckled with white dots, spire rather obtusely conical, whorls convex, lip callously thickened.

LAMARCK, Anim. sans vert. vol. 10. p. 439.

Hab. Mouth of the Gambia, West Africa. Cape de Verd Islands.

Well distinguished by its peculiar deep carnelian-orange colour, sparsely freckled with white.

Species 17. (Fig. *a*, *b*, *c*, *d*, Mus. Taylor.)

MARGINELLA VITTATA. *Marg. testâ subpyriformi-ovatâ, roseâ vel cærulescente-griseâ, lineis brevibus irregularibus fusco-nigricantibus spiraliter vittatâ, vittis subdistantibus, spirâ prominulâ, anfractibus supernè declivi-angulatis, infernè attenuatis, labro attenuato fusco-nigricante punctato.*

THE FILLETED MARGINELLA. Shell somewhat pyriformly-ovate, rose-coloured or bluish-grey, spirally filleted with short, irregular, fuscous-black lines, fillets rather distant, spire prominent, whorls slopingly angled round the upper part, attenuated towards the lower, lip thickened, dotted with fuscous-black.

Hab. ——?

A fine new species, of which Mr. Taylor possesses the two well-marked varieties figured in the accompanying Plate, one a uniform bluish-grey colour, the other a deep rose. Mr. Cuming possesses also a specimen of the rose-coloured variety.

Species 18. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA IRRORATA. *Marg. testâ conico-ovatâ, suboblongâ, pallidè carneâ, punctis albis undique copiosè lentiginosâ, spirâ subacuminatâ, anfractibus supernè declivi-gibbosis, labro calloso-incrassato.*

THE BEDEWED MARGINELLA. Shell conically ovate rather oblong, pale flesh-colour, copiously freckled throughout with white dots, spire somewhat acuminated, whorls slopingly gibbous round the upper part, lip callously thickened.

MENKE, Jay, Cat. p. 93.

Hab. Senegal, West Africa.

Closely allied to *M. glabella*, but more elongated in form, and more profusely more regularly dotted.

19.a.

20.a.

20.b.

21.a.

22.a.

22.b.

21.b.

23.a.

23.b.

19.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

MARGINELLA.

PLATE VI.

Species 19. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA OLIVÆFORMIS. *Marg. testâ conico-oblongâ, violaceo-carneâ, lacteo-albo strigatâ et nebulatâ, spirâ breviusculâ, anfractibus supernè declivi-turgidis; labro latè incrassato, aurantio marginato, intus rosaceo.*

THE OLIVE-SHAPED MARGINELLA. Shell conically oblong, violet flesh-colour, streaked and clouded with milky-white, spire rather short, whorls slopingly turgid round the upper part; lip broadly thickened, edged with orange, pinkish within.

KIENER, Icon. Coq. viv. p. 12. pl. 8. f. 36.

Hab. Senegal, West Africa.

A neat delicately-coloured species, prettily tinted in the interior with a warm pink.

Species 20. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA NIVOSA. *Marg. testâ subobeso-conicâ, violaceo-spadiceâ, opaco-albâ longitudinaliter floccatâ, spirâ brevi, anfractibus supernè gibbosiusculis; labro incrassato, albo.*

THE SNOW-FLAKED MARGINELLA. Shell rather stoutly conical, violet-fawn, longitudinally flaked with opaque white, spire short, whorls rather gibbous round the upper part; lip thickened, white.

HINDS, Pro. Zool. Soc. 1844, p. 74.

Hab. West Indies.

A round-shouldered shell, longitudinally flaked with opake-white, upon a peculiar violet-fawn ground.

Species 21. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA LABIATA. *Marg. testâ obeso-pyriformi, albidâ, livido-violaceo tinctâ et obscurè latè trifasciatâ, spirâ parvâ, brevissimâ, anfractibus supernè tumido-rotundatis, nitentibus; labro latè incrassato, aurantio marginato.*

THE LIPPED MARGINELLA. Shell stoutly pear-shaped, very short, whitish, tinged and obscurely broadly three-banded with livid-violet, spire small, whorls tumidly rounded at the upper part, shining; lip broadly thickened, edged with orange.

VALENCIENNES, Kiener, Icon. Coq. viv. pl. 11. f. 2.

Hab. Gulf of Mexico.

Remarkable for the delicacy of its shining livid enamel, and characteristic orange-bordered lip.

Species 22. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA LARGILLIERI. *Marg. testâ ovatâ, pallidè violaceo-spadiceâ, medio plus minus obscurè latifasciatâ, maculis albidis eximiè floccatâ, spirâ immersâ, anfractibus convexo-rotundatis; labro incrassato, aurantio, columellâ triplicatâ.*

LARGILLIER'S MARGINELLA. Shell ovate, pale violet-fawn, more or less obscurely broad-banded in the middle, delicately flaked with whitish spots, spire immersed, whorls convexly rounded; lip thickened, orange, columella three-plaited.

KIENER, Icon. Coq. viv. p. 43. pl. 11. f. 3.

Hab. Bahia.

Another very delicate and beautiful species in which the spire is quite immersed, and the columella only three-plaited.

Species 23. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA CURTA. *Marg. testâ obtusè conicâ, lividè griseâ, opaco-albo copiosè tenuè lentiginosâ, spirâ parvâ, acutâ, anfractibus supernè gibboso-angulatis; labro incrassato, aurantio marginato.*

THE SHORT MARGINELLA. Shell obtusely conical, livid grey, copiously finely freckled with opaque white, spire small, sharp, whorls gibbously angled round the upper part; lip thickened, edged with violet.

SOWERBY, Pro. Zool. Soc. 1832, p. 105.

Hab. Iquiqui and Payta, Peru, (dredged from a bed of fine black sand), Cuming.

The most characteristic feature of this species is its obtusely conical form, the upper part of the whorls being gibbously angled.

24.a.

25.a.

25.b.

26.a.

25.c.

25.d.

26.b.

27.a.

27.b.

24.b.

MARGINELLA.

PLATE VII.

Species 24. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA FABA. *Marg. testâ subfusiformi-ovatâ, cinereo-albâ, punctis grandibus nigris aspersâ, spirâ elevatâ, anfractibus supernè declivi-angulatis, ad angulum longitudinaliter plicato-nodatis; labro incrassato, intus denticulato.*

THE BEAN MARGINELLA. Shell somewhat fusiformly ovate, ash-white, sprinkled with large black dots, spire raised, whorls slopingly angled round the upper part, longitudinally plicately noduled on the angle; lip thickened, denticulated within.

Voluta faba, Linnæus, Syst. Nat. p. 1189.

Marginella fuba, Lamarck.

Hab. Senegal, West Africa.

Of a round subfusiform growth, rarely clouded with colour, while the black dots are bold and conspicuous.

Species 25. (Fig. *a*, *b*, *c*, *d*, Mus. Taylor.)

MARGINELLA BIFASCIATA. *Marg. testâ latè subfusiformi-ovatâ, cinereo-albidâ, violaceo-griseo nebulatâ et obscurè bifasciatâ, punctis minutis copiosè aspersâ, spirâ elevatâ, anfractibus supernè declivi-angulatis, ad angulum longitudinaliter plicato-nodatis; labro latè incrassato, intus denticulato.*

THE TWO-BANDED MARGINELLA. Shell broadly somewhat fusiformly ovate, ash-white, clouded and obscurely two-banded with violet-grey, copiously sprinkled with fine dots, spire raised, whorls slopingly angled at the upper part, longitudinally plicately noduled at the angle; lip broadly thickened, denticulated within.

LAMARCK, Anim. sans vert. vol. 10. p. 438.

Hab. Senegal, West Africa.

Broader, more harp-shaped, than the preceding species, with much more variety of colour and marking, while the dots are minute and very numerous.

Species 26. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA PSEUDO-FABA. *Marg. testâ subfusiformi-ovatâ, ad basin recurvâ, albidâ, olivaceo-griseo undulato-strigatâ, punctis nigris oblongis undique fasciatâ, spirâ elevatâ, anfractibus supernè declivi-angulatis; labro latè incrassato, intus denticulato.*

THE FALSE-BEAN MARGINELLA. Shell somewhat fusiformly ovate, recurved at the base, whitish, undulately streaked with olive-grey, banded throughout with oblong black dots, spire raised, whorls slopingly angled round the upper part; lip broadly thickened, denticulated within.

SOWERBY, Pro. Zool. Soc. 1846, p. 96.

Hab. Mouth of the Gambia, West Africa.

Of an elegantly curved form, the finest species of this type of the genus, with the black dots more oblong, and more regularly disposed in bands.

Species 27. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA ADANSONI. *Marg. testâ subfusiformi ovatâ, cinereâ, griseo nebulatâ, lineis cæruleo-nigris hic illic punctatis, profusè obliquè undulatâ, spirâ elevatâ, anfractibus supernè obtusè declivi-angulatis, ad angulum longitudinaliter plicato-nodatis; labro latè incrassato, intus denticulato.*

ADANSON'S MARGINELLA. Shell somewhat fusiformly ovate, ash-colour, clouded with grey, profusely, obliquely waved with blue-black lines, here and there dotted, spire raised, whorls slopingly obtusely angled at the upper part, longitudinally plicately noduled at the angle; lip broadly thickened, denticulated within.

KIENER, Icon. Coq. viv. pl. 7. f. 27.

Hab. Isle of Goree, West Africa.

The most obvious peculiarity of this species is its crowded, obliquely waved painting of blue-black lines, which are peculiar in being dotted at intervals.

28.a.

29.a.

29.b.

30.a.

31.a.

31.b.

30.b.

32.a.

32.b.

28.b.

Sowerby.del et lith.

Vincent Brooks, Imp.

MARGINELLA.

PLATE VIII.

Species 28. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA FORMICULA. *Marg. testâ subfusiformi-ovatâ, fulvescente-albâ, spirâ elevatâ, anfractibus supernè concavo-angulatis, ad angulum plicato-nodulatis; labro rotundato-incrassato, nitente.*

THE LITTLE ANT MARGINELLA. Shell somewhat fusiformly ovate, fulvous-white, spire raised, whorls concavely angled round the upper part, plicately noduled at the angle; lip rotundately thickened, shining.

LAMARCK, Anim. sans vert. vol. x. p. 441.

Hab. Tasmania (in sandy mud at the depth of three fathoms); H. Benson.

A small colourless species of the harpiform type.

Species 29. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA MUSCARIA. *Marg. testâ subfusiformi-ovatâ, diaphano-albâ, nitente, carneo tinctâ, spirâ elevatâ, anfractibus supernè gibbosis, subangulatis, ad angulum callosis, obscurè plicatis; labro rotundato-incrassato, eburneo.*

THE FLY-LIKE MARGINELLA. Shell somewhat fusiformly ovate, transparent-white, shining, tinged with flesh-colour, spire raised, whorls gibbous, and slightly angled at the upper part, callous, and obscurely plicated at the angle; lip rotundately thickened, ivory-white.

LAMARCK, Anim. sans vert. vol. x. p. 441.

Hab. Tasmania.

Very like the preceding species, but of a more gibbous callous growth, as though overlaid with a shining diaphanous coating of flesh-coloured enamel, the lip retaining an ivory-whiteness.

Species 30. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA SPLENDENS. *Marg. testâ subfusiformi-ovatâ, fulvescente-cinereâ, maculis olivaceis arcuatis trifasciatâ, undique tenui-punctatâ, spirâ elevatâ, anfractibus supernè gibboso-rotundatis, longitudinaliter undique crebricostatis; labro latè incrassato, intus denticulato.*

THE SPLENDID MARGINELLA. Shell somewhat fusiformly-ovate, fulvous-ash, three-banded with arched olive spots, everywhere finely dotted, spire raised, whorls gibbously rounded at the upper part, longitudinally closely ribbed throughout; lip broadly thickened, denticulated within.

HUMPHREYS, MS., Reeve, Conch. Syst. vol. ii. pl. 277. f. 2, 3.

Marginella Reeveana, Petit.

Hab. Guinea, West Africa.

Distinguished from all other species of the genus by its well-defined crowded sculpture of close-set longitudinal ribs.

Species 31. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA HARPÆFORMIS. *Marg. testâ subfusiformi-ovatâ, fulvescente-albâ, cinereo fasciatâ, punctis nigris seriatim cinctâ, spirâ elevatâ, anfractibus supernè obtusè angulatis, ad angulum longitudinaliter plicato-costatis; labro latè incrassato, intus denticulato.*

THE HARP-SHAPED MARGINELLA. Shell somewhat fusiformly ovate, fulvous-white, banded with ash, encircled with rows of black dots, spire raised, whorls obtusely angled round the upper part, longitudinally plicately ribbed at the angle; lip broadly thickened, denticulated within.

BECK, MS., Sowerby, Thes. Conch. Marg. p. 374. pl. 74. f. 7, 8.

Hab. Senegal, West Africa.

Closely allied to *M. faba* and *bifasciata* of the same locality, and possibly only a dwarf form of one of those species.

Species 32. (Fig. *a*, *b*, Mus. Bell.)

MARGINELLA BELLII. *Marg. testâ subfusiformi-ovatâ, fulvescente-cinereâ, lineis tenuibus cæruleo-griseis longitudinaliter confertim undatis, obscurè bifasciatâ, spirâ elevatâ, anfractibus supernè obtusè angulatis, ad angulum plicato-nodulatis, deinde costatis; labro incrassato, intus denticulato.*

BELL'S MARGINELLA. Shell somewhat fusiformly-ovate, fulvous-ash, longitudinally closely waved with fine blue-grey lines, obscurely two-banded, spire raised, whorls obtusely angled round the upper part, plicately noduled at the angle, then ribbed; lip broadly thickened, denticulated within.

SOWERBY, Thes. Conch. Marg. p. 375. pl. 74. f. 28, 29.

Hab. ——?

This species appears to me to be distinct. At first sight it presents the idea of being a dwarf, strongly sculptured variety of *M. Adansoni*, but it is not so. It may be noticed that in *M. Adansoni* the painted lines are invariably interrupted with dots, here they are smooth, of an undoubtedly distinct specific character.

33.a.

34.a.

34.b.

35.a.

36.a.

36.b.

35.b.

37.a.

37.b.

33.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

MARGINELLA.

PLATE IX.

Species 33. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA BELCHERI. *Marg. testâ fusiformi-conicâ, fulvescente-albâ, nitente, fumeo-purpureo, in lineis brevibus longitudinalibus medio nebulato-fasciatâ, spirâ conicâ, anfractibus supernè declivi-tumidis; labro incrassato, eburneo.*

BELCHER'S MARGINELLA. Shell fusiformly conical, fulvous-white, shining, cloudedly banded about the middle with smoky-purple in short longitudinal lines, spire conical, whorls slopingly tumid round the upper part; lip thickened, ivory-white.

HINDS, Pro. Zool. Soc. 1844, p. 73. Moll. Voy. Sulphur, pl. 13. f. 1 to 5.

Hab. Cape Blanco, West Africa (dredged from a depth of from twelve to fifteen fathoms); Belcher.

A smooth shining shell delicately pencilled throughout, but more especially in the middle with close-set bands of short smoky-purple or fuscous lines.

Species 34. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA MUSICA. *Marg. testâ subabbreviato-conicâ, fulvescente-cinereâ, griseo nebulatâ, lineis nigris conspicuis æquidistantibus undique cingulatâ, spirâ brevi, anfractibus supernè tumido-rotundatis; labro modicè incrassato.*

THE MUSIC MARGINELLA. Shell rather shortly conical, fulvous-ash, clouded with grey, encircled throughout with conspicuous equidistant black lines, spire short, whorls tumidly rounded at the upper part; lip moderately thickened.

HINDS, Pro. Zool. Soc. 1844, p. 73. Moll. Voy. Sulphur, pl. 13. f. 8, 9.

Hab. Cape Blanco, West Africa (dredged from sand at the depth of thirty-five fathoms); Belcher.

Of a peculiar shortly-conical form, encircled throughout with neatly-defined equidistant black lines.

Species 35. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA DIADOCHUS. *Marg. testâ fusiformi-oblongâ, tenuiculâ, pallidè cinereâ, aurantio tinctâ, lineis nigris inæquidistantibus undique cingulatâ, spirâ subobtusè conicâ, anfractibus supernè declivibus; labro parum incrassato.*

THE BERYL MARGINELLA. Shell fusiformly oblong, rather thin, pale ash-colour, tinged with orange, encircled throughout at unequal distances with black lines, spire rather obtusely conical, whorls sloping round the upper part; lip but little thickened.

ADAMS and REEVE, Moll. Voy. Samarang, p. 28. pl. 7. f. 4. *a*, *b*, *c*.

Hab. Straits of Sunda (from a sandy floor at a depth of about three fathoms); Belcher.

The figure of this very characteristic species in the 'Mollusca of the Voyage of the Samarang,' is accompanied by a beautiful drawing of the living animal made by Mr. Arthur Adams, at the time of its capture in the Straits of Sunda.

Species 36. (Fig. *a*, *b*, Mus. Taylor.)

MARGINELLA NODATA. *Marg. testâ fusiformi-oblongâ, fulvescente-cinereâ, olivaceo tinctâ, lineis nigris, hic illic punctatis, longitudinaliter undatâ, spirâ elevatâ, anfractibus supernè obtusè subangulatis, ad angulum obscurè plicato-nodatis; labro incrassato.*

THE KNOTTED MARGINELLA. Shell fusiformly oblong, fulvous-ash tinged with olive, longitudinally waved with black lines, dotted at intervals, spire raised, whorls slightly obtusely angled round the upper part, obscurely plicately noduled at the angle; lip thickened.

HINDS, Pro. Zool. Soc. 1844, p. 73. Moll. Voy. Sulphur, pl. 13. f. 6, 7.

Hab. Cape Blanco, West Africa (dredged from sand at a depth of from twelve to fifteen fathoms); Belcher.

The black dots which appear at intervals on the longitudinally waved lines give them a knotted appearance.

Species 37. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA CLERYI. *Marg. testâ fusiformi-oblongâ, subangustâ, cinereo-albâ, plumbeo-cæruleo nebulatâ, lineis nigris conspicuis longitudinaliter strigatâ, spirâ subacuminatâ, anfractibus supernè vix tumidis, callosis, nitentibus, labro incrassato.*

CLERY'S MARGINELLA. Shell fusiformly oblong, rather narrow, ash-white, clouded with leaden-blue, longitudinally streaked with conspicuous black lines, spire rather acuminated, whorls but little swollen round the upper part, callous, shining, lip thickened.

PETIT, Mag. de Zool. 1836, Moll. pl. 73.

Hab. Senegal, West Africa.

Distinguished by its unusually narrow fusiform growth, while the longitudinal lines are not intercepted by dots.

87967

38.a.

39.a.

39.b.

40.a.

41.a.

41.b.

40.b.

42.a.

42.b.

38.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

MARGINELLA.

PLATE X.

Species 38. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA BERNARDII. *Marg. testâ cylindraceo-oblongâ, fulvescente-cinereâ, griseo lineari-strigatâ, spirâ parvâ, immersâ, anfractibus supernè tumido-rotundatis; labro modicè incrassato, albo, columellâ sex-plicatâ.*

BERNARDI'S MARGINELLA. Shell cylindrically oblong, fulvous-ash, linearly streaked with grey, spire small, immersed, whorls tumidly rounded at the upper part; lip moderately thickened, white, columella six-plaited.

LARGILLIER, Mag. de Zool. 1845; Moll. pl. 116.

Marginella onychina, Adams and Reeve.

Hab. China Sea.

Of a characteristic cylindrical form, with the spire immersed, and the painting streaked, like the marking of an agate. The columella is six-plaited.

Species 39. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA PULCHRA. *Marg. testâ oblongo-ovatâ, lutescente-lacteâ, fasciis duabus brunneis distantibus intus cingulatâ, spirâ parvâ, exsertâ; labro modicè incrassato, subflexuoso.*

THE BEAUTIFUL MARGINELLA. Shell oblong-ovate, yellowish cream-colour, encircled within with two distant brown bands, spire small, exserted; lip moderately thickened, somewhat flexuous.

GRAY, Zool. Beechey's Voy. p. 135. pl. 36. f. 20.

Hab. St. Domingo, West Indies.

Encircled by two very characteristic distant brown bands, the colour of which is deposited in the interior of the shell, and is seen externally through its substance, of a soft milky hue.

Species 40. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA QUINQUEPLICATA. *Marg. testâ obeso-ovatâ, solidiusculâ, cærulescente-albâ, spirâ parum exsertâ, anfractibus supernè tumido-convexis; labro incrassato, columellâ quinque- ad sex-plicatâ.*

THE FIVE-PLAITED MARGINELLA. Shell stoutly ovate, rather solid, bluish-white, spire but little exserted, whorls tumidly convex round the upper part; lip thickened, columella five- to six-plaited.

LAMARCK, Anim. sans vert. vol. x. p. 437.

Hab. Malacca (dredged from coarse gravel at the depth of eight fathoms); Cuming.

In some specimens of this well-known species there are indications of a sixth plait on the columella.

Fig. 41, *a*, *b*.

This shell, *Marginella Hainesii*, Petit, is certainly nothing more than a callous thickened variety of the preceding species *M. quinqueplicata*.

Species 42. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA DACTYLUS. *Marg. testâ angustè oblongâ, cylindraceâ, livido-cinereâ, spirâ immersâ, occultâ, anfractibus supernè rotundatis, vix tumidis; labro incrassato, columellâ quinque-plicatâ.*

THE FINGER MARGINELLA. Shell narrowly oblong, cylindrical, livid ash-colour, spire immersed, hidden, whorls rounded at the upper part, scarcely swollen; lip thickened, columella five-plaited.

LAMARCK, Anim. sans vert. vol. x. p. 442.

Hab. Hongkong; Hinds.

This species, with its concealed spire, has very much of the general aspect of a *Volvaria*.

43.a.

44.a.

44.b.

45.a.

46.a.

46.b.

45.b.

47.a.

47.b.

43.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

MARGINELLA.

PLATE XI.

Species 43. (Fig. *a*, *b*, Mus. Taylor.)

MARGINELLA AMYGDALA. *Marg. testâ subobeso-ovatâ, callosâ, fulvescente-lacteâ, spirâ parvâ, parum exsertâ, anfractibus supernè gibbosis; labro calloso-incrassato, ad apicem varicato, spadiceo supra et infra marginato.*

THE ALMOND MARGINELLA. Shell rather stoutly ovate, callous, fulvous-cream-colour, spire small, but little exserted, whorls gibbous round the upper part; lip callously thickened, variced to the apex, edged above and below with fawn-colour.

KIENER, Icon. coq. viv. pl. 11. f. 1.

Hab. Senegal, West Africa.

A solid enamelled species, having the lip edged above and below with fawn-colour.

Species 44. (Fig. *a*, *b*, Mus. Taylor.)

MARGINELLA CINCTA. *Marg. testâ conico-ovatâ, subdepressâ, eburneâ, cingulo calloso aurantio, spirâ subexsertâ, anfractibus supernè gibbosis; labro latè incrassato, undique varicato.*

THE GIRDLED MARGINELLA. Shell conically ovate, somewhat depressed, ivory-white, encircled with a callous belt of orange, spire rather exserted, whorls gibbous round the upper part; lip broadly thickened, variced throughout.

KIENER, Icon. coq. viv. pl. 8. f. 32.

Hab. Mexico.

The bright-orange callous varix which encircles this shell stands out in prominent and delicate contrast with the ivory whiteness of the body whorls.

Species 45. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA PRUNUM. *Marg. testâ oblongo-ovatâ, olivaceo-cinereâ, spirâ exsertâ, anfractibus supernè declivi-convexis; labro incrassato, flexuoso, supernè mucronato, intus brunneâ.*

THE PLUM MARGINELLA. Shell oblong-ovate, olive-white, spire exserted, whorls slopingly convex at the upper part; lip thickened, flexuous, pointed at the upper part, interior brown.

Voluta prunum, Gmelin, Syst. Nat. p. 3446.
Marginella cærulescens, Lamarck.
Marginella prunum, Deshayes.

Hab. Panama (dredged from sandy mud at the depth of ten fathoms); Cuming.

A smooth-tinted shell, brown-stained in the interior, the chief peculiarity of which consists in the lip terminating suddenly at the base of the spire in a callous, angular point.

Species 46. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA MARGINATA. *Marg. testâ ovatâ, solidissimâ, violascente-cinereâ, obsoletè bifasciatâ, spirâ parvâ, anfractibus modicè convexis; labro valde incrassato, undique callosè bivaricoso, varice spadiceâ.*

THE MARGINED MARGINELLA. Shell ovate, very solid, violet-ash, obsoletely two-banded, spire small, whorls moderately convex; lip much thickened, callously doubly varicosed throughout, varix fawn-coloured.

Voluta marginata, Born, Mus. Vindobon. p. 220. pl. 9. f. 5, 6.
Marginella bivaricosa, Lamarck.

Hab. Senegal, West Africa.

Chiefly distinguished by the callous encircling varix being duplicated.

Species 47. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA SAPOTILLA. *Marg. testâ oblongo-ovatâ, pallidè olivaceo-cinereâ, spirâ breviusculâ, anfractibus modicè convexis; labro incrassato, albo, spadiceo marginato, intus brunneâ.*

THE SOAPWORT MARGINELLA. Shell oblong-oval, pale olive-ash, spire rather short, whorls moderately convex; lip thickened, white, edged with fawn, interior brown.

HINDS, Pro. Zool. Soc. 1844, p. 74.

Hab. Panama (in sandy mud at depths of from five to thirteen fathoms); Cuming.

This comes very near to *M. prunum*. The lip is not, however, angularly pointed at the upper part, while it is edged throughout with fawn-colour.

48.a.

49.a.

49.b.

50.a.

51.a.

51.b.

50.b.

52.a.

52.b.

48.b.

Sowerby, del. et lith.

Vincent Brooks, Imp

MARGINELLA.,

PLATE XII.

Species 48. (Fig. *a*, *b*, Mus. Taylor.)

MARGINELLA QUADRILINEATA. *Marg. testâ cylindraceo-oblongâ, cinereo-griseâ, lineis quatuor saturatioribus distantibus cingulatâ, spirâ immersâ, occultâ, anfractibus modicè convexis; labro incrassato.*

THE FOUR-LINED MARGINELLA. Shell cylindrically oblong, ash-grey, encircled with four distant darker lines, spire immersed, concealed, whorls moderately convex; lip thickened.

Hab. ——?

Belonging to the same type as *M. tricincta*, but specifically distinct. The plaiting of the columella is different, and the shell is of lighter and narrower structure.

Species 49. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA TRICINCTA. *Marg. testâ ovatâ, virescente-cinereâ, fasciis rufis subdistantibus cingulatâ, spirâ immersâ, occultâ, anfractibus supernè tumidiusculis; labro modicè incrassato, columellâ quinque-plicatâ.*

THE THREE-GIRT MARGINELLA. Shell ovate, greenish-ash-colour, encircled with three rather distant reddish bands, spire immersed, concealed, whorls rather swollen towards the upper part; lip moderately thickened, columella five-plaited.

HINDS, Pro. Zool. Soc. 1844, p. 76. Moll. Voy. Sulphur, pl. 13. f. 12, 13.

Hab. Straits of Macassar (in coarse sand at the depth of eleven fathoms); Belcher.

The red bands which characterize this species are secreted in the interior of the shell, and are somewhat obscured externally.

Species 50. (Fig. *a*, *b*, Mus. Taylor.)

MARGINELLA GUTTATA. *Marg. testâ subpyriformi-oblongâ, carneâ, obscurè bifasciatâ, guttis opaco-albis undique floccatâ, spirâ parvâ, vix exsertâ, callosâ, anfractibus supernè gibbosiusculis; labro latè incrassato, albo, rufescente-spadiceo remotè maculato.*

THE SPOTTED MARGINELLA. Shell somewhat pyriformly oblong, flesh-coloured, obscurely two-banded, flaked throughout with opake-white spots, spire small, scarcely exserted, callous, whorls rather gibbous round the upper part; lip broadly thickened, white, distantly spotted with reddish-fawn.

Voluta guttata, Dillwyn, Cat. Shells, vol. i. p. 526.

Marginella longivaricosa, Lamarck.

Marginella guttata, Deshayes (not of Swainson).

Hab. West Indies. Honduras.

An abundant species, characterized by a copious sprinkling of opake-white flakes.

Species 51. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA OBLONGA. *Marg. testâ subpyriformi-oblongâ, carneâ, spadiceo tinctâ et obscurè trifasciatâ, supra et infra maculatâ, spirâ parvâ, vix exsertâ, callosâ, anfractibus supernè declivibus, deinde gibbosiusculis, versus basin plus minus attenuatis; labro incrassato, albo, spadiceo-rufo remotè bimaculato.*

THE OBLONG MARGINELLA. Shell somewhat pyriformly oblong, flesh-coloured, tinged and obscurely three-banded with fawn, spotted above and below, spire small, scarcely exserted, callous, whorls sloping at the upper part, then rather gibbous, more or less attenuated towards the base; lip thickened, white, distantly two-spotted with fawn-red.

SWAINSON, Zool. Illus. vol. ii. pl. 1. f. 1.

Marginella carnea, Storer.

Marginella amabilis, Redfield.

Hab. West Indies. Gulf of Mexico.

A very near ally of the preceding species, but constantly distinguished by its more attenuated growth towards the base.

Species 52. (Fig. *a*, *b*, Mus. Taylor.)

MARGINELLA CORNEA. *Marg. testâ ovatâ, subarcuatâ, fulvescente-carneâ, pallidè carneolo-rufescente quadrifasciatâ, spirâ fere occultâ, anfractibus supernè subtumido-convexis; labro parum incrassato, intus minutè denticulato, columellâ multiplicatâ.*

THE HORNY MARGINELLA. Shell ovate, somewhat curved, fulvous flesh-colour, four-banded with pale carnelion red, spire almost concealed, whorls somewhat tumidly convex at the upper part; lip but little thickened, minutely denticulated within, columella many-plaited.

LAMARCK, Anim. sans vert. vol. x. p. 444.

Hab. Senegal, West Africa.

It will be seen by the plaiting of the columella of this well-known species, and by the minute denticulation of the lip, that it constitutes the type of a distinct section.

53.a.

54.a.

54.b.

55.a.

56.a.

56.b.

55.b.

57.a.

57.b.

53.b.

MARGINELLA.

PLATE XIII.

Species 53. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA PORCELLANA. *Marg. testâ subobeso-ovatâ, albidâ, maculis rubidis quadratis undique confertim seriatim pictâ, spirâ immersâ, fere occultâ, anfractibus supernè declivibus, deinde gibboso-tumidis; labro modicè incrassato, intus minutè denticulato, columellâ valde callosâ, callositate albâ.*

THE PORCELAIN MARGINELLA. Shell rather stoutly ovate, whitish, painted throughout with close-set rows of square ruddy spots, spire immersed, almost hidden, whorls sloping at the upper part, then gibbously swollen; lip moderately thickened, minutely denticulated within, columella very callous, callosity white.

Voluta porcellana, Chemnitz, Conch. Cab. vol. x. p. 164. pl. 150. f. 1419, 1420.
Marginella tessellata, Lamarck.

Hab. Venezuela; Dyson.

The tessellated spots which characterize this species are singularly constant in their form and distribution.

Species 54. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA FULMINATA. *Marg. testâ subpyriformi-ovatâ, solidâ, albidâ, spadiceo longitudinaliter undatâ, spirâ obtusè conicâ, anfractibus supernè gibboso-convexis; labro incrassato.*

THE LIGHTNING-MARKED MARGINELLA. Shell somewhat pyriformly ovate, solid, whitish, longitudinally waved with fawn, spire obtusely conical, whorls gibbously convex at the upper part; lip thickened.

KIENER, Icon. coq. viv. pl. 12. f. 1.

Hab. Brazil.

A very striking species, neatly painted throughout with conspicuous longitudinal waves of fawn-colour.

Species 55. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA ANGUSTATA. *Marg. testâ oblongo-ovatâ, solidiusculâ, cinereo-albâ, cærulescente-griseo strigatâ et fasciatâ, spirâ parvâ, callosâ, fere occultâ, anfractibus supernè declivi-tumidis; labro latissimè calloso, purpureo-fuscescente, medio inflexo.*

THE NARROWED MARGINELLA. Shell oblong-ovate, rather solid, ash-white, streaked and banded with bluish-grey, spire small, callous, almost hidden, whorls slopingly tumid round the upper part; lip very broadly callous, purplish-brown, inflected in the middle.

SOWERBY, Thes. Conch. Marg. p. 399. pl. 77. f. 169, 170.
Marginella bullata, Kiener (not *Voluta bullata*, Born).

Hab. Brazil.

This belongs to a type of which there are very few species in the genus.

Species 56. (Fig. *a*, *b*, Mus. Taylor.)

MARGINELLA CINGULATA. *Marg. testâ abbreviato-pyriformi, nitente-albâ, lineis rufis conspicuis cingulatâ, spirâ immersâ, anfractibus supernè gibboso-rotundatis; labro incrassato, columellâ multiplicatâ.*

THE BELTED MARGINELLA. Shell shortly pyriform, shining white, encircled with conspicuous red lines, spire immersed, whorls gibbously rounded at the upper part; lip thickened, columella many-plaited.

Voluta cingulata, Dillwyn, Cat. Shells, vol. i. p. 525.
Marginella lineata, Lamarck.
Marginella Bobi, De Blainville.
Marginella cingulata, Deshayes.

Hab. Senegal, West Africa.

The red lines, it may be observed, lose their parallelism below the middle of the shell.

Species 57. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Taylor.)

MARGINELLA PERSICULA. *Marg. testâ obeso-ovatâ, subpyriformi, fulvescente-albâ, purpurascente-rufo copiosè guttatâ, spirâ immersâ, fere occultâ, anfractibus supernè declivibus, deinde gibboso-tumidis; labro incrassato, columellâ multiplicatâ.*

THE SPOTTED MARGINELLA. Shell stoutly ovate, slightly pyriform, fulvous-white, copiously spotted with fulvous-red, spire immersed, almost hidden, whorls sloping at the upper part, then gibbously swollen; lip thickened, columella many-plaited.

Voluta persicula, Linnæus, Syst. Nat. p. 1189.
Persicula fasciata, Schumacher.

Hab. Mouth of the Gambia, West Africa.

This was formerly supposed to be a variety of the preceding species, but it differs constantly in form as well as in painting.

58.

59.a.

59.b.

60.a.

61.

62.

60.b.

63.a.

63.b.

64.

Sowerby, del. et. lith.

Vincent Brooks, Imp.

MARGINELLA.

PLATE XIV.

Species 58. (Mus. Cuming.)

MARGINELLA SCRIPTA. *Marg. testâ retusè ovatâ, cinereâ, nitente, lineis nigris acutè angulatis longitudinaliter fasciatâ, anfractibus supernè tumidiusculis, labro intus denticulato, columellâ quinqueplicatâ.*

THE WRITTEN MARGINELLA. Shell bluntly ovate, ash-colour, shining, longitudinally banded with black zigzag lines, whorls rather tumid round the upper part, lip denticulated within, columella five-plaited.

HINDS, Pro. Zool. Soc. 1844, p. 73; Moll. Voy. Sulph. pl. 13. f. 16, 17.

Hab. Straits of Macassar (in coarse sand, at a depth of from eleven to fifteen fathoms); Belcher.

The longitudinal lines of this bright little species are mostly festooned at regular intervals with blotches.

Species 59. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA IMBRICATA. *Marg. testâ oblongo-ovatâ, flavescente-albâ, rufo-fusco transversim tessellatâ, columellâ callosâ, plicis subobscuris; aperturâ angustâ, labro calloso-incrassato.*

THE IMBRICATED MARGINELLA. Shell oblong-ovate, yellowish-white, transversely tessellated with red-brown, columella callous, plaits rather obscure; aperture narrow, lip callously thickened.

HINDS, Pro. Zool. Soc. 1844, p. 76.

Hab. Acapulco.

Frequently encircled round the middle with a band of interrupted blotches.

Species 60. (Fig. *a*, *b*, Mus. Bell.)

MARGINELLA LILACINA. *Marg. testâ obtusè ovatâ, solidiusculâ, albidâ, lilacino undique fasciatâ et tinctâ, spirâ immersâ, labro latè incrassato, intus denticulato, columellâ quadriplicatâ.*

THE LILAC-TINGED MARGINELLA. Shell obtusely ovate, rather solid, whitish, banded and stained with pale-lilac, spire immersed, lip broadly thickened, denticulated within, columella four-plaited.

SOWERBY, Thes. Conch. Marg. p. 402. pl. 78. f. 176, 177.

Hab. ——?

This shell, of which the specimen here figured from the collection of Professor Bell is the only one known, is certainly distinct from any other species. Resembling *M. Largillieri* in general aspect, it is of stouter proportions, with a different arrangement of columellar plaits, and a totally distinct plan of colouring.

Species 61. (Mus. Cuming.)

MARGINELLA SIMILIS. *Marg. testâ ovatâ, solidiusculâ, flavescente-albâ, griseo profusè nebulatâ et vittatâ, spirâ ferè obsoletâ, anfractibus supernè gibbosis, labro incrassato, haud reflexo.*

THE SIMILAR MARGINELLA. Shell ovate, rather solid, yellowish-white, profusely clouded and filleted with grey, spire nearly obsolete, whorls gibbous round the upper part, lip thickened, not reflected.

SOWERBY, Pro. Zool. Soc. 1846, p. 97.

Hab. Brazil.

Very closely allied to *M. interrupta*, and probably only a variety of that species.

Species 62. (Mus. Cuming.)

MARGINELLA INTERRUPTA. *Marg. testâ suboblongo-ovatâ, albidâ, griseo profusè interruptè vittatâ, spirâ subobsoletâ, anfractibus supernè gibbosiusculâ, labro crassè reflexo.*

THE INTERRUPTED MARGINELLA. Shell somewhat oblong-ovate, whitish, profusely interruptedly filleted with grey, spire somewhat obsolete, whorls rather gibbous round the upper part, lip thickly reflected.

LAMARCK, Anim. sans vert. vol. x. p. 446.

Hab. West Indies; Venezuela.

Well distinguished by its characteristic filleting of interrupted grey lines. There are many varieties of the species, more or less over-clouded with grey.

Species 63. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA KIENERIANA. *Marg. testâ pyriformi-ovatâ, solidâ, aurantio-spadiceâ, maculis albis nigro-umbratis conspicuè quadrifasciatâ, spirâ minutâ, vix exsertâ, columellâ callosâ, undique plicatâ.*

KIENER'S MARGINELLA. Shell pyriformly-ovate, solid, orange-fawn, conspicuously four-banded with white black-shaded spots, spire minute, scarcely exserted, columella callous, plaited throughout.

PETIT, Guerin, Mag. de Zool. 1838, pl. 110.

Hab. Venezuela.

An extremely interesting species, having a strong general resemblance to the dark-clouded variety of *Cypræa ziczac*.

Species 64. (Mus. Cuming.)

MARGINELLA MULTILINEATA. *Marg. testâ obtusè ovatâ, flavescente, lineis rufis confertis undique cingulatâ, spirâ immersâ, anfractibus supernè gibbosis, columellâ tumidâ, opaco-albâ.*

THE MANY-LINED MARGINELLA. Shell obtusely ovate, yellowish, encircled throughout with close-set red lines, spire immersed, whorls gibbous round the upper part, columella swollen, opake-white.

SOWERBY, Pro. Zool. Soc. 1846, p. 96.

Hab. Belize, Bay of Honduras; Dyson.

Of the same typical form as the West India *M. interrupta*, characterized by the neat regularity of its transverse red lines.

65.a.

66.

67.

68.a.

69.a.

69.b.

68.b.

70.

71.

65.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

MARGINELLA.

PLATE XV.

Species 65. (Fig. *a*, Mus. Taylor; Fig. *b*, Mus. Cuming.)

MARGINELLA MACULOSA. *Marg. testâ obtusè ovatâ, solidiusculâ, albidâ, guttis rubidis anticè saturatis peculiariter nebulatâ vel tessellatâ, spirâ immersâ, columellâ tumidâ, opaco-albâ.*

THE SPOTTED MARGINELLA. Shell obtusely ovate, rather solid, whitish, peculiarly clouded or tessellated with ruddy spots, which are darker towards the front, spire immersed, columella swollen, opake-white.

Marginella guttata, Swainson (not of Lamarck), Zool. Illus. vol. ii. pl. 1. f. 2.

Marginella maculosa, Kiener.

Hab. Island of St. Vincent's, West Indies.

The spots in this very characteristic species are mostly intensified in colour towards the margin of the shell.

Species 66. (Mus. Cuming.)

MARGINELLA PULCHELLA. *Marg. testâ oblongo-ovatâ, albidâ, lineis carneis nebulatis longitudinaliter undatâ, spirâ immersâ, anfractibus supernè constrictis, columellâ quadriplicatâ.*

THE PRETTY MARGINELLA. Shell oblong-ovate, whitish, longitudinally waved with clouded flesh-tinted lines, spire immersed, whorls constricted round the upper part, columella four-plaited.

KIENER, Icon. Coq. viv. p. 27. pl. 9. f. 41.

Hab. Sydney, New South Wales.

Of a delicate, porcelain-like character.

Species 67. (Mus. Cuming.)

MARGINELLA PHRYGIA. *Marg. testâ obtusè ovatâ, flavescente, annulis rufis interruptis nebulatâ et fasciatâ, spirâ immersâ, anfractibus supernè gibbosiusculis, columellâ tumidâ.*

THE EMBROIDERED MARGINELLA. Shell obtusely ovate, yellowish, clouded and banded with red interrupted rings, spire immersed, whorls rather gibbous round the upper part, columella swollen.

SOWERBY, Thes. Conch. Marg. p. 394. pl. 78 f. 218, 219.

Hab. Gulf of California.

Allied to *M. maculosa* of the West Indies, but the painting only presents ringed outlines of the spots.

Species 68. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA DE BURGHIÆ. *Marg. testâ cylindraceo-oblongâ, tenuiculâ, pellucido-albâ, maculis punctisque aurantio-rufis alternatim seriatim cinctâ, spirâ immersâ, columellâ conspicuè quadriplicatâ.*

DE BURGH'S MARGINELLA. Shell cylindrically oblong, rather thin, transparent white, alternately encircled with rows of orange-red spots and dots, spire immersed, columella conspicuously four-plaited.

ADAMS, MS. in Mus. Cuming.

Hab. Swan River.

A very distinct species, of a bright, porcelain-like character, painted alternately with rows of orange-red spots and dots.

Species 69. (Mus. Cuming.)

MARGINELLA MURALIS. *Marg. testâ elongato-ovatâ, albidâ, nitente, maculis quadratis punctisque rufescentibus nebulato-fasciatâ, spirâ immersâ, anfractibus supernè constrictis, columellâ triplicatâ.*

THE WALL MARGINELLA. Shell elongately-ovate, whitish, shining, cloudedly banded with square red spots and dots, spire immersed, whorls constricted at the upper part, columella three-plaited.

HINDS, Pro. Zool. Soc. 1844, p. 76.

Hab. West Indies.

Named *muralis* from a fancied resemblance of the rows of spots to the courses of bricks in a wall.

Species 70. (Mus. Cuming.)

MARGINELLA SAGITTATA. *Marg. testâ obtusè ovatâ, albidâ, maculis rufis sagittatis copiosè cinctâ, spirâ*

immersâ, anfractibus supernè gibbosiusculis, columellâ quadriplicatâ.

The arrow-headed Marginella. Shell obtusely ovate, whitish, copiously encircled with reddish arrow-headed spots, spire immersed, whorls rather gibbous round the upper part, columella four-plaited.

Hinds, Pro. Zool. Soc. 1844, p. 76.

Hab. Brazil.

The markings in this species, which are very profuse, have an arrow-headed character, but they are disposed to be ringed, running a little into one another.

Species 71. (Mus. Taylor.)

Marginella frumentum. *Marg. testâ obtusè ovatâ, albidâ, lineis ferrugineo-rufis longitudinaliter copiosè undatâ, spirâ immersâ, anfractibus supernè gibbosis, columellâ quadriplicatâ.*

The corn Marginella. Shell obtusely ovate, whitish, copiously longitudinally waved with rust-red lines, spire immersed, whorls gibbous round the upper part, columella four-plaited.

Sowerby, Pro. Zool. Soc. 1832, p. 57.

Hab. West Indies.

The marking, which has obscurely the form of bands of rings, runs into longitudinal waves.

72

73a

73b

74

75a

75b

76

77a

77b

78

MARGINELLA.

PLATE XVI.

Species 72. (Fig. 72, Mus. Taylor; and 73 *a*, *b*, Mus. Cuming.)

MARGINELLA CATENATA. *Marg. testâ obtusè ovatâ, flavescente-albâ, rufo-fusco transversim catenatâ et longitudinaliter lineatâ, spirâ immersâ, columellâ validè quadriplicatâ.*

THE CHAINED MARGINELLA. Shell obtusely ovate, yellowish-white, transversely chained and longitudinally lineated with red-brown, spire immersed, columella strongly four-plaited.

Voluta catenata, Montagu, Test. Brit. vol. i. p. 236. pl. 6. f. 2.
Volvaria catenata, Blainville.
Marginella catenata, Brown.

Hab. West Indies.

This very beautifully-marked West India species has been for many years included erroneously in the British Fauna.

Species 74. (Mus. Cuming.)

MARGINELLA AUSTRALIS. *Marg. testâ subtrigono-ovatâ, solidiusculâ, livido-flavescente, nitente, spirâ conicâ, anfractibus supernè obtusè angulatis, labro incrassato, albido, columellâ calloso-quadriplicatâ.*

THE SOUTHERN MARGINELLA. Shell somewhat triangularly ovate, rather solid, livid yellowish, shining, spire conical, whorls obtusely angled round the upper part, lip thickened, whitish, columella callously four-plaited.

HINDS, Pro. Zool. Soc. 1844, p. 75.
Marginella oryza, Pease.

Hab. North-west coast of Australia (in coral sand at low water); Dring.

A glittering solid shell of simple character.

Species 75. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA ORYZA. *Marg. testâ obtusè ovatâ, albidâ vel flavescente-aurantiâ, fasciâ fulvo-rufâ latâ medio conspicuè cingulatâ, spirâ minutâ, anfractibus supernè gibbosis, columellâ triplicatâ.*

THE RICE-GRAIN MARGINELLA. Shell obtusely ovate, whitish or yellowish-orange, conspicuously encircled round the middle with a broad fulvous-red band, spire minute, whorls gibbous round the upper part, columella three-plaited.

Volvaria oryza, Lamarck (not *M. oryza*, Pease), Anim. sans vert. vol. x. p. 460.
Le Stipon, Adanson.
Marginella oryza, Deshayes.
Marginella miliaria, Sowerby (not *Voluta miliaria*, Linnæus).

Hab. Senegal.

Remarkably characterized by its conspicuous broad fulvous-brown band.

Species 76. (Mus. Cuming.)

MARGINELLA DIAPHANA. *Marg. testâ obtusè conicâ, fulvescente-aurantiâ, nitente, tenui, diaphanâ, spirâ parum exsertâ, anfractibus supernè tumidis, labro incrassato, aurantio-rufo, columellâ quadriplicatâ.*

THE DIAPHANOUS MARGINELLA. Shell obtusely conical, fulvous-orange, glittering, thin, transparent, spire but little exserted, whorls swollen round the upper part, lip thickened, orange-red, columella four-plaited.

KIENER, Icon. Coq. viv. p. 38. pl. 12. f. 3.
Marginella pellucida, Pfeiffer.

Hab. Cuba.

A semitransparent glittering horny shell, partaking very much of the general form of a *Melampus*.

Species 77. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA ZONATA. *Marg. testâ cylindraceo-elongatâ, medio subcoarctatâ, tenui, albidâ, fulvo-aurantio latifasciatâ vel bilineatâ, spirâ vix exsertâ, labro flexuoso, columellâ quadriplicatâ.*

THE ZONED MARGINELLA. Shell cylindrically elongated, somewhat contracted in the middle, thin, whitish, broadly banded or bilineated with fulvous-orange, spire scarcely exserted, lip flexuous, columella four-plaited.

KIENER, Icon. Coq. viv. p. 41. pl. 13. f. 4.

Hab. West Indies.

A delicate flexuously cylindrical shell, of semitransparent substance, delicately banded or lineated with fulvous-orange.

Species 78. (Mus. Cuming.)

MARGINELLA MARGARITA. *Marg. testâ obtusè conicâ, pellucido-albâ, spirâ modicè exsertâ, anfractibus supernè gibbosiusculis, labro incrassato, intus denticulato, columellâ quadriplicatâ.*

THE PEARL MARGINELLA. Shell obtusely conical, transparent white, spire moderately exserted, whorls rather gibbous round the upper part, lip thickened, denticulated within, columella four-plaited.

KIENER, Icon. Coq. viv. p. 15. pl. 9. f. 42.

Hab. Island of St. Vincent, West Indies.

The columellar plaits and the labral denticulations are rather prominently developed.

80.

79.

81.

82.

83.a.

83.b.

84.

85.a.

85.b.

86.

MARGINELLA

PLATE XVII.

Species 79. (Mus. Cuming.)

MARGINELLA FUSIFORMIS. *Marg. testâ fusiformi-ovatâ, versus basin attenuatâ, lacteâ, nitente, aurantio-fusco interdum lineari-fasciatâ, spirâ conicâ, labro flexuoso, columellâ quadriplicatâ.*

THE FUSIFORM MARGINELLA. Shell fusiformly ovate, attenuated towards the base, cream-colour, shining, sometimes linearly banded with orange-brown, spire conical, lip flexuous, columella four-plaited.

HINDS, Pro. Zool. Soc. 1844, p. 75; Moll. Voy. Sulph. pl. 13. f. 20, 21.

Hab. Straits of Malacca (in mud, at the depth of seventeen fathoms); Belcher.

A glittering fusiform shell, with a flexuous lip.

Species 80. (Mus Cuming.)

MARGINELLA NITIDA. *Marg. testâ oblongo-cylindraceâ, pellucido-corneâ, nitente, spirâ obtusè conicâ, labro subflexuoso, columellâ obliquè quadriplicatâ.*

THE SHINING MARGINELLA. Shell oblong-cylindrical, transparent horny, shining, spire obtusely conical, lip slightly flexuous, columella obliquely four-plaited.

Marginella (Volvarina) nitida, Hinds, Pro. Zool. Soc. 1844, p. 75.

Hab. ——?

A semitransparent brownish horny shell, bright and glossy throughout.

Species 81. (Mus. Cuming.)

MARGINELLA LACTEA. *Marg. testâ cylindraceo-oblongâ, subfusiformi, lacteâ, nitente, spirâ obtusè conicâ, labro flexuoso, columellâ triplicatâ.*

THE CREAM-COLOURED MARGINELLA. Shell cylindrically oblong, slightly fusiform, cream-coloured, shining, spire obtusely conical, lip flexuous, columella three-plaited.

KIENER, Icon. Coq. viv. p. 42. pl. 13. f. 3.

Hab. West Indies.

A shell of simple character; peculiar, however, in having only three plaits on the columella.

Species 82. (Mus. Cuming.)

MARGINELLA FUSCA. *Marg. testâ conico-oblongâ, fuscescente, nitente, fulvo-rufo trifasciatâ, spirâ obtusè conicâ, anfractibus supernè tumidiusculis, labro flexuoso, columellâ quadriplicatâ.*

THE FUSCOUS MARGINELLA. Shell conically oblong, fuscous, shining, three-banded with fulvous-red, spire obtusely conical, whorls rather swollen round the upper part; lip flexuous, columella four-plaited.

SOWERBY, Pro. Zool. Soc. 1846, p. 95; Thes. Conch. Marg. p. 392. pl. 76. f. 122, 123.

Hab. West Indies.

Of somewhat horny substance, banded in rather an irregular manner.

Species 83. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA AVENA. *Marg. testâ fusiformi-cylindraceâ, albidâ, nitente, roseo vel fuscescente variè interruptè latifasciatâ, spirâ subexsertâ; labro flexuoso, versus medium compresso, columellâ quadriplicatâ.*

THE OAT MARGINELLA. Shell fusiformly cylindrical, whitish, shining, variously interruptedly broadly banded with pink or brown, spire somewhat exserted; lip flexuous, compressed towards the middle, columella four-plaited.

VALENCIENNES, Kiener, Icon. Coq. viv. p. 17. pl. 6. f. 24.
Marginella varia, Sowerby.
Marginella Beyerleana, Bernardi.

Hab. West Indies. Honduras.

An extremely pretty species, of a narrow flexuous growth, variously interruptedly banded with bright rose-pink or brown.

Species 84. (Mus. Cuming.)

MARGINELLA PHILIPPINARUM. *Marg. testâ oblongo-cylindraceâ, cinereo-albidâ, nitente, obscurè lividè trifasciatâ, spirâ parvâ; labro flexuoso, columellâ obliquè quadriplicatâ.*

THE PHILIPPINE MARGINELLA. Shell oblong cylindrical, ash-white, shining, obscurely lividly three-banded, spire small, lip flexuous, columella obliquely four-plaited.

Redfield, Ann. New York Lyc. Nat. Hist. 1848, p. 492. pl. 17. f. 3.

Marginella avena, Sowerby (not of Valenciennes).

Hab. Island of Bohol, Philippines (under stones at low water); Cuming.

In this species, collected by Mr. Cuming at the Philippine Islands, the lip is not compressed towards the middle as in the preceding species.

Species 85. (Fig. *a*, *b*, Mus. Cuming.)

Marginella tæniata. *Marg. testâ fusiformi-cylindraceâ, flavescente-albâ, nitente, pallidè spadiceo variè fasciatâ, spirâ parvâ; labro modicè incrassato, subflexuoso, columellâ quadriplicatâ.*

The filleted Marginella. Shell fusiformly cylindrical, yellowish-white, shining, variously banded with light fawn-colour, spire small; lip moderately thickened, slightly flexuous, columella four-plaited.

Sowerby, Pro. Zool. Soc. 1846, p. 96.

Hab. ——?

Allied to *M. avena*, but distinguished by a much smaller spire.

Species 86. (Mus. Cuming.)

Marginella pallida. *Marg. testâ oblongo-cylindraceâ, tenuiculâ, sordidè lacteâ, nitente, spirâ parvâ, labro flexuoso, columellâ arcuatâ, quadriplicatâ.*

The pale Marginella. Shell oblong cylindrical, rather thin, dull cream-colour, shining, spire small; lip flexuous, columella arched, four-plaited.

Bulla pallida, Linnæus, Syst. Nat. 10th ed. p. 727.

Voluta pallida, Linnæus, Syst. Nat. 12th ed.

Volvaria pallida, Lamarck.

Hyalina pallida, Schumacher.

Marginella pallida, Kiener.

Hab. West Indies.

A light cylindrical shell of thin semitransparent substance, though a little opake, with the columella more than usually arched.

87.a.

87.b.

88.

89.a.

90.a.

90.b.

89.b.

91.a.

91.b.

92.

Sowerby, del. et lith.

Vincent Brooks, Imp.

MARGINELLA.

PLATE XVIII.

Species 87. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Taylor.)

MARGINELLA CONOIDALIS. *Marg. testâ conico-ovatâ, flavescente-lacteâ, spirâ modicè exsertâ, anfractibus supernè obtusè angulatis, labro crassè reflexo, sæpissime rufo maculato, columellâ validè quadriplicatâ.*

THE CONOID MARGINELLA. Shell conically ovate, yellowish cream-colour, spire moderately exserted, whorls obtusely angled round the upper part, lip thickly reflected, mostly dotted with red, columella strongly four-plaited.

KIENER, Icon. Coq. viv. p. 37. pl. 12. f. 2.
Marginella apicina, Menke.
Hab. West Indies.

A rather solid, *Volute*-shaped species, sparingly but characteristically dotted behind the lip with red.

Species 88. (Mus. Cuming.)

MARGINELLA PRUINOSA. *Marg. testâ conico-ovatâ, flavescente vel livido-purpureâ, opaco-albo undique floccatâ, spirâ modicè exsertâ, anfractibus supernè gibboso-angulatis, labro crassè reflexo, columellâ validè quadriplicatâ.*

THE FROSTED MARGINELLA. Shell conically ovate, yellowish or livid purple, flaked throughout with opake-white, spire moderately exserted, whorls gibbously angled round the upper part, lip thickly reflected, columella strongly four-plaited.

HINDS, Pro. Zool. Soc. 1844, p. 74.
Hab. West Indies.

Copiously sprinkled throughout with opake-white flakes upon a yellowish or livid purple ground.

Species 89. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA OVUM. *Marg. testâ ovatâ, eburneâ, spirâ subprofundè immersâ, anfractibus supernè declivi-convexis, aperturâ angustâ, labro crassè reflexo, columellâ quadriplicatâ, plicâ penultimâ continuâ, tumidâ.*

THE EGG MARGINELLA. Shell ovate, ivory-white, spire rather deeply immersed, whorls slopingly convex round the upper part, aperture narrow, lip thickly reflected, columella four-plaited, the penultimate plait continuous, swollen.

Hab. —— ?

The penultimate plait of the columella is curiously swollen and made continuous with the thickened marginal lip.

Species 90. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA SAULCYANA. *Marg. testâ subpyriformi-ovatâ, albidâ, griseo tinctâ, spirâ subacutè conicâ, anfractibus supernè gibbosis, labro tumido-incrassato, ad apicem producto, aurantio marginatâ, columellâ tumido-callosâ, validè quadriplicatâ.*

SAULCY'S MARGINELLA. Shell somewhat pyriformly ovate, whitish, tinged with grey, spire rather sharply conical, whorls gibbous round the upper part, lip tumidly thickened, produced to the apex, edged with orange, columella tumidly callous, strongly four-plaited.

PETIT, Journ. Conch.
Marginella Loroisii, Bernardi.
Hab. West Indies. Venezuela.

Very closely allied to *M. cincta*, and possibly a variety of that species.

Species 91. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA SARDA. *Marg. testâ subgloboso-ovatâ, Ovulæformi, albidâ, violaceo-carneo pallidè fasciatâ et tinctâ, spirâ immersâ, anfractibus supernè rotundatis, aperturâ arcuatâ, labro latè incrassato, intus denticulato, columellâ quadriplicatâ.*

THE CARNELIAN MARGINELLA. Shell somewhat globosely ovate, *Ovulum*-shaped, whitish, faintly banded and stained with violet flesh-colour, spire immersed, whorls rounded at the upper part, aperture arched, lip broadly thickened, denticulated within, columella four-plaited.

KIENER, Icon. Coq. viv. p. 30. pl. 4. f. 42.
Hab. Ceylon.

A very characteristic *Ovulum*-like species of solid growth.

Species 92. (Mus. Taylor.)

MARGINELLA CRASSILABRUM. *Marg. testâ obtusè ovatâ, flavescente vel cinereo-griseâ, spirâ parvâ, labro calloso-incrassato, aurantio interdum marginato, columellâ calloso-incrassatâ, quadriplicatâ.*

THE THICK-LIPPED MARGINELLA. Shell obtusely ovate, yellowish or ash-grey, spire small, lip callously thickened, sometimes edged with orange, columella callously thickened, four-plaited.

SOWERBY, Pro. Zool. Soc. 1846, p. 96.
Hab. West Indies.

A great variety of abnormal forms of the *M. cincta* type come into this species.

93.

94.a.

94.b.

95.a.

96.a.

96.b.

95.b.

97.a.

97.b.

98.

MARGINELLA.

PLATE XIX.

Species 93. (Mus. Cuming.)

MARGINELLA FESTIVA. *Marg. testâ conico-ovatâ, roseo et griseo pulchrè marmoratâ et fasciatâ, spirâ subproductâ, labro incrassato, intus denticulato, columellâ quadriplicatâ.*

THE PLEASANT MARGINELLA. Shell conically ovate, prettily mottled and banded with rose-pink and grey, spire rather produced, lip thickened, denticulated within, columella four-plaited.

KIENER, Icon. Coq. viv. p. 32. pl. 10. f. 4.

Hab. East Africa.

Mottled and banded in a conspicuous manner with deep rose-pink and grey.

Fig. 94. (Mus. Cuming.)

This shell, the type of Mr. Arthur Adams' *M. gemma*, proves to be a variety of the preceding species, *M. festiva*.

Species 95. (Mus. Taylor.)

MARGINELLA ALBOCINCTA. *Marg. testâ conico-ovatâ, cinereo-griseâ, copiosè nigro-punctatâ, fasciâ albâ supernè cingulatâ, spirâ subexsertâ, anfractibus supernè gibbosis, labro incrassato, columellâ quadriplicatâ.*

THE WHITE-BELTED MARGINELLA. Shell conically ovate, ash-grey, copiously dotted with black, encircled round the upper part with a white band, spire rather exserted, whorls gibbous round the upper part, lip thickened, columella four-plaited.

SOWERBY, Pro. Zool. Soc. 1846, p. 96.

Hab. —— ?

I have no good opinion of this species. It appears to be a variety of *M. piperita*, in which a white band is formed by an accidental absence of colouring matter.

Species 96. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA CONSTRICTA. *Marg. testâ subfusiformi-conicâ, albidâ, obscurè fasciatâ, spirâ acutè conicâ, anfractibus versus basin attenuatis, labro crassè reflexo, subflexuoso, columellâ quadriplicatâ.*

THE CONSTRICTED MARGINELLA. Shell somewhat fusiformly conical, white, obscurely banded, spire sharply conical, whorls attenuated towards the base, lip thickly reflected, slightly flexuous, columella four-plaited.

HINDS, Pro. Zool. Soc. 1844, p. 74.

Hab. —— ?

Of a peculiar tapering form, but of very simple character in detail.

Species 97. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA HONDURASENSIS. *Marg. testâ ovatâ, tenui, inflatâ, flavescente-corneâ, nitente, livido-fusco trifasciatâ, spirâ subacutè conicâ, aperturâ subpatulâ, labro vix incrassato, columellâ quadriplicatâ.*

THE HONDURAS MARGINELLA. Shell ovate, thin, inflated, yellowish horn-colour, shining, three-banded with livid-brown, spire rather sharply conical, aperture rather wide open, lip scarcely thickened, columella four-plaited.

Hab. Honduras.

Distinguished by its light inflated growth and peculiar tone of colour.

Species 98. (Mus. Cuming.)

MARGINELLA VEXILLUM. *Marg. testâ conico-ovatâ, albidâ, violaceo-fusco fasciatâ et maculatâ, spirâ subprominulâ, anfractibus supernè tumido-gibbosis, infernè attenuatis, labro tumido-incrassato, undique punctato, intus denticulato, columellâ quadriplicatâ.*

THE FLAG MARGINELLA. Shell conically ovate, whitish, banded and blotched with violet-brown, spire rather prominent, whorls tumidly gibbous round the upper part, attenuated at the lower, lip tumidly thickened, dotted throughout, denticulated within, columella four-plaited.

REDFIELD, MS. in Mus. Cuming.

Hab. Cape Palmas, Liberia.

This appears to be a very characteristic species, but I have only a very indifferent specimen to judge by.

99.

100.

101.

102.

103.a.

103.b.

104.

105.a.

105.b.

106.

Sowerby, del. et lith.

Vincent Brooks, Imp.

MARGINELLA.

PLATE XX.

Species 99. (Mus. Cuming.)

MARGINELLA BIBALTEATA. *Marg. testâ fusiformi-oblongâ, angustâ, pellucidâ, nitente, fasciis duabus rufo-fuscis distantibus cingulatâ, spirâ subexsertâ, labro modicè incrassato, subflexuoso, columellâ quadriplicatâ.*

THE TWO-BELTED MARGINELLA. Shell fusiformly oblong, narrow, transparent, glittering, encircled with two distant red-brown bands, spire rather exserted, lip moderately thickened, rather flexuous, columella four-plaited.

Hab. West Indies.

A pretty, transparent, glittering shell, conspicuously encircled with two distant red-brown bands, the upper of which in one whorl falls in the suture of the next.

Species 100. (Mus. Taylor.)

MARGINELLA LIVIDA. *Marg. testâ oblongo-cylindraceâ, angustâ, livido-cinereâ, pellucidâ, obscurissimè bifasciatâ, spirâ parvâ, labro flexuoso, columellâ quadriplicatâ.*

THE LIVID MARGINELLA. Shell oblong-cylindrical, narrow, livid-ash, transparent, very obscurely two-banded, spire small, lip flexuous, columella four-plaited.

Hab. ——?

A livid, semitransparent cylindrical shell, with a very small spire.

Species 101. (Mus. Cuming.)

MARGINELLA GUTTULA. *Marg. testâ oblongo-cylindraceâ, pellucidâ, vitreâ, aurantio-fusco pallidè trifasciatâ, spirâ parvâ, labro flexuoso, columellâ quadriplicatâ.*

THE LITTLE DROP MARGINELLA. Shell oblong-cylindrical, transparent, glassy, faintly three-banded with orange-brown, spire small, lip flexuous, columella four-plaited.

Hab. ——?

A bright, glassy shell, encircled with three very faint but well-defined bands of orange-brown.

Species 102. (Mus. Cuming.)

MARGINELLA TRIBALTEATA. *Marg. testâ conico-cylindraceâ, opaco-albâ, nitente, fasciis tribus aurantio-fuscis cingulatâ, spirâ parvâ, anfractibus supernè tumidiusculis, infernè attenuatis, labro modicè flexuoso, columellâ quadriplicatâ.*

THE THREE-BELTED MARGINELLA. Shell conically cylindrical, opake-white, shining, encircled with three orange-brown bands, spire small, whorls rather swollen at the upper part, attenuated at the lower, lip moderately flexuous, columella four-plaited.

Hab. ——?

Encircled with three conspicuous orange bands upon a shining, rather opake, milk-white ground.

Species 103. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA NAVICELLA. *Marg. testâ oblongo-cylindraceâ, subinflatâ, carneo-albâ, nitente, aurantio obscurè quadrifasciatâ, spirâ parvâ, labro subflexuoso, columellâ quadriplicatâ.*

THE SKIFF MARGINELLA. Shell oblong-cylindrical, a little inflated, flesh-white, shining, obscurely four-banded with orange, spire small, lip somewhat flexuous, columella four-plaited.

Hab. ——?

Of a more inflated growth than either of the preceding species.

Species 104. (Mus. Cuming.)

MARGINELLA EFFULGENS. *Marg. testâ oblongo-cylindraceâ, semipellucido-albâ, nitente, fasciis tribus aurantio-fuscis latiusculis cingulatâ, labro subflexuoso, columellâ quadriplicatâ.*

THE GLITTERING MARGINELLA. Shell oblong-cylindrical, semitransparent, shining, encircled with three rather broad, orange-brown bands, lip somewhat flexuous, columella four-plaited.

Hab. Island of St. Thomas, West Indies.

A bright, glossy, semitransparent shell, encircled with rather broad bands of colour.

Species 105. (Fig. *a*, *b*, Mus. Bell.)

MARGINELLA CYLINDRICA. *Marg. testâ oblongo-cylindraceâ, inflatâ, albidâ, aurantio-fusco obscurissimè irregulariter multifusciatâ, spirâ parvâ, labro subflexuoso, columellâ triplicatâ.*

THE CYLINDRICAL MARGINELLA. Shell oblong-cylindrical, inflated, whitish, very obscurely and irregularly many-banded with orange-brown, spire small, lip rather flexuous, columella three-plaited.

SOWERBY, Thes. Conch. Marg. p. 390. pl. 76. f. 134.

Hab. —— ?

Distinguished by a rather inflated growth, and by having only three plaits on the columella, while the very faint bands are quite irregular in width and distribution.

Species 106. (Mus. Bell.)

MARGINELLA INFLEXA. *Marg. testâ subtrigono-oblongâ, pellucidâ, livido-corneâ, nitente, spirâ subexsertâ, labro flexuoso, columellâ quadriplicatâ.*

THE INFLECTED MARGINELLA. Shell somewhat triangularly-oblong, transparent, livid horny, glossy, spire rather exserted, lip flexuous, columella four-plaited.

SOWERBY, Thes. Conch. Marg. p. 389. pl. 76. f. 132.

Hab. —— ?

The spire is more exserted than in the preceding allied species.

107.

108.a.

108.b.

109.

110.a.

110.b.

111.

112.

113.

114.

Sowerby, del et lith.

Vincent Brooks, Imp.

MARGINELLA.

PLATE XXI.

Species 107. (Mus. Cuming.)

MARGINELLA ALABASTER. *Marg. testâ cylindraceo-ovatâ, nitente-albâ, subopacâ, spirâ parvâ, anfractibus convexis, labro subflexuoso, columellâ quadriplicatâ.*

THE ALABASTER MARGINELLA. Shell cylindrically-ovate, shining-white, rather opake, spire small, whorls convex, lip somewhat flexuous, columella four-plaited.

Hab. ——?

A glittering, rather opake-white species, without any indication of colour.

Species 108. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA PEASII. *Marg. testâ oblongo-cylindraceâ, pellucido-albâ, nitente, fulvescente obscurissimè fasciatâ, spirâ parvâ, labro opaco, subflexuoso, columellâ quadriplicatâ.*

PEASE'S MARGINELLA. Shell oblong-cylindrical, transparent-white, shining, very obscurely banded with fulvous, spire small, lip opake, slightly flexuous, columella four-plaited.

Marginella cylindrica, Pease (not of Sowerby), Pro. Zool. Soc. 1862, p. 244.

Hab. Kingsmill Islands, Pacific Ocean; Pease.

A very delicate, transparent species, with only a very faint indication of any colour.

Species 109. (Mus. Taylor.)

MARGINELLA IMMERSA. *Marg. testâ subpyriformi-ovatâ, cæruleo-albâ, spirâ parvâ, immersâ, anfractibus supernè tumido-rotundatis, labro calloso-reflexo, columellâ validè quinqueplicatâ.*

THE IMMERSED MARGINELLA. Shell somewhat pyriformly-ovate, bluish-white, spire small, immersed, whorls tumidly rounded at the upper part, lip callously reflected, columella strongly five-plaited.

Hab. ——?

It is difficult to convey an accurate notion of this species, either by figure or description, but it is clearly distinct to the eye.

Species 110. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA CANTHARUS. *Marg. testâ oblongo-ovatâ, pellucido-corneâ, solidiusculâ, obscurè fasciatâ, spirâ subexsertâ, labro incrassato, opaco-albo, columellâ quadriplicatâ.*

THE BEETLE MARGINELLA. Shell oblong-ovate, transparent-horny, rather solid, obscurely banded, spire rather exserted, lip thickened, opake-white, columella four-plaited.

Hab. ——?

A rufous-horny shell, though of solid growth, with an opake-white lip.

Species 111. (Mus. Cuming.)

MARGINELLA MONILIS. *Marg. testâ oblongo-ovatâ, solidiusculâ, nitente-eburneâ, spirâ parvâ, anfractibus supernè tumidis, labro subflexuoso, columellâ quadriplicatâ.*

THE NECKLACE MARGINELLA. Shell oblong-ovate, rather solid, shining ivory-white, spire small, whorls swollen round the upper part, lip somewhat flexuous, columella four-plaited.

Voluta monilis, Born, Mus. Vindob. p. 219.
Volvaria monilis, Lamarck.
Marginella monilis, Kiener.

Hab. Senegal.

Named from the circumstance of this species being used in great abundance by the natives strung in necklaces.

Species 112. (Mus. Cuming.)

MARGINELLA RUFESCENS. *Marg. testâ ovatâ, versus basin attenuatâ, rufescente-corneâ, nitente, spirâ parvâ, anfractibus supernè gibbosis, labro flexuoso, columellâ quadriplicatâ.*

THE RUFOUS MARGINELLA. Shell ovate, rather attenuated towards the base, rufous-horny, shining, spire small, whorls rather gibbous round the upper part, lip flexuous, columella four-plaited.

Hab. ——?

A reddish-horny shell, rather attenuated in form towards the base. .

Species 113. (Mus. Cuming.)

Marginella Capensis. *Marg. testâ ovatâ, subinflatâ, nitente-albâ, carneo-tinctâ, spirâ parvâ, labro flexuoso, columellâ quadriplicatâ.*

The opake Marginella. Shell ovate, rather inflated, shining white, tinged with flesh-colour, spire small, lip flexuous, columella four-plaited.

Dunker, MS. in Mus. Cuming.

Hab. Cape of Good Hope.

Of a rather inflated growth.

Species 114. (Mus. Cuming.)

Marginella Traillii. *Marg. testâ oblongo-cylindraceâ, utrinque subquadratâ, flavescente-albâ, spirâ parvâ, anfractibus supernè obtusè angulatis, labro crassè reflexo, columellâ quinqueplicatâ.*

Traill's Marginella. Shell oblong-cylindrical, somewhat square at each end, yellowish-white, spire small, whorls obtusely angled round the upper part, lip thickly reflected, columella five-plaited.

Hab. Malacca; Dr. Traill.

Allied in form and general typical character to *M. dactylus.*

115.

116.

117.

118.a.

119.a.

119.b.

118.b.

120.

121.

122.

MARGINELLA.

PLATE XXII.

Species 115. (Mus. Cuming.)

MARGINELLA SIMPLEX. *Marg. testâ ovatâ, flavescente-albâ, solidiusculâ, nitente, spirâ parvâ, anfractibus supernè tumidiusculis, labro incrassato, subflexuoso, columellâ quadriplicatâ.*

THE SIMPLE MARGINELLA. Shell ovate, yellowish-white, rather solid, shining, spire small, whorls rather swollen round the upper part, lip thickened, rather flexuous, columella four-plaited.

Hab. Australia; Strange.

A small species of simple character, without marking, and with only a tinge of colour.

Species 116. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA ATTENUATA. *Marg. testâ conico-ovatâ, subfusiformi, pellucido-conicâ, spirâ subexsertâ, anfractibus supernè tumidiusculis, versus basin attenuatis, labro flexuoso, columellâ obliquè quadriplicatâ.*

THE ATTENUATED MARGINELLA. Shell conically ovate, somewhat fusiform, transparent horny, spire a little exserted, whorls slightly swollen round the upper part, attenuated towards the base, lip flexuous, columella obliquely four-plaited.

Hab. Sydney, New South Wales; Strange.

Chiefly distinguished by its attenuated form.

Species 117. (Mus. Cuming.)

MARGINELLA PYRULUM. *Marg. testâ obtusè pyriformi, solidâ, flavescente-albâ, opacâ, spirâ parvâ, anfractibus ad basin constrictis, labro intus denticulato, columellâ quadriplicatâ.*

THE LITTLE PEAR MARGINELLA. Shell obtusely pear-shaped, solid, yellowish-white, opake, spire small, whorls constricted at the base, lip denticulated within, columella four-plaited.

Hab. Island of St. Thomas, West Indies.

Of a characteristic pear-shape of solid growth.

Species 118. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA ELECTRUM. *Marg. testâ subtrigono-ovatâ, flavescente-fuscâ, spirâ conico-exsertâ, anfractibus supernè obtusè angulatis, deinde tumidis, aperturâ patulâ, labro latè incrassato, columellâ perobliquè quadriplicatâ.*

THE AMBER MARGINELLA. Shell somewhat triangularly-ovate, yellowish-brown, spire conically exserted, whorls obtusely angled round the upper part, then swollen, aperture wide open, lip broadly thickened, columella very obliquely four-plaited.

Hab. ——?

A *Volute*-shaped species, with a wide aperture and broadly thickened lip.

Species 119. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA ANNULATA. *Marg. testâ conico-ovatâ, solidiusculâ, flavescente-albâ, nitente, lineâ fuscâ supernè annulatâ, anfractibus supernè gibboso-angulatis, labro subflexuoso, columellâ quadriplicatâ.*

THE RINGED MARGINELLA. Shell conically ovate, rather solid, yellowish-white, shining, ringed with a brown line at the upper part, whorls gibbously angled round the upper part, lip rather flexuous, columella four-plaited.

Hab. ——?

A well-defined species, distinguished among other characters by a brown ring encircling the base of the spire.

Species 120. (Mus Cuming.)

MARGINELLA DENS. *Marg. testâ pyriformi, solidiusculâ, nitente-albâ, spirâ immersâ, anfractibus supernè gibboso-tumidis infernè constrictis, columellâ calloso-tumidâ, minutè quadriplicatâ.*

THE TOOTH MARGINELLA. Shell pear-shaped, rather solid, shining-white, spire immersed, whorls gibbously swollen at the upper part, constricted at the lower, columella callously swollen, minutely four-plaited.

Hab. Borneo.

A very distinct, pear-shaped species of porcelain-white, particularly rounded and bulbous-like at the spire.

Species 121. (Mus. Cuming.)

MARGINELLA CHRYSOMELINA. *Marg. testâ ovatâ, crassiusculâ, albidâ, guttis quadratis rufescentibus pallidissimè tessellatâ, spirâ immersâ, anfractibus supernè declivi-gibbosis, columellâ calloso-tumidâ, minutè quadriplicatâ.*

THE GOLD-PLATED MARGINELLA. Shell ovate, rather thick, whitish, tessellated with very faint square ruddy spots, spire immersed, whorls slopingly gibbous round the upper part, columella callously swollen, minutely four-plaited.

REDFIELD, Ann. New York Lyc. Nat. Hist. 1848, p. 492.

Hab. Island of St. Thomas, West Indies.

This may prove to be an outlying diminutive form of the Venezuelan *M. maculosa*.

Species 122. (Mus. Cuming.)

MARGINELLA TURBINATA. *Marg. testâ subtrigono-ovatâ, solidiusculâ, flavescente-albâ, spirâ parvâ, anfractibus supernè tumidis et declivi-angulatis, ad angulum crenulato-plicatis, labro crassè reflexo, continuo, columellâ quadriplicatâ.*

THE TURBINATED MARGINELLA. Shell somewhat triangularly-ovate, rather solid, yellowish-white, spire small, whorls swollen and slopingly angled round the upper part, crenulately plicated at the angle, lip thickly reflected, continuous, columella four-plaited.

SOWERBY, Thes. Conch. Marg. p. 385, pl. 75. f. 70, 71. *Marginella albina*, Gaskoin.

Hab. Australia; Strange.

Distinguished by a character which does not appear in any other species of the genus,—a crenulated plication round the upper part of the whorls.

123.

124a.

124b.

125.

126a.

126b.

127.

128a.

128b.

129.

MARGINELLA.

PLATE XXIII.

Species 123. (Mus. Taylor.)

MARGINELLA MARGARITA. *Marg. testâ trigono-conicâ, albidâ, spirâ subexsertâ, anfractibus supernè gibboso-angulatis, labro crassè reflexo, intus denticulato, columellâ validè quadriplicatâ.*

THE PEARL MARGINELLA. Shell triangularly-conical, white, spire rather exserted, whorls gibbously angled round the upper part, lip thickly reflected, toothed within, columella strongly four-plaited.

KIENER, Icon. Coq. viv. p. 15. pl. 9. f. 42.

Hab. India.

A small, *Melampus*-like shell, conspicuously denticulated within the lip.

Species 124. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA SERRATA. *Marg. testâ angustè conicâ, subfusiformi, nitente-albâ, spirâ subobtusâ, labro crassè reflexo, intus denticulato, columellâ quadriplicatâ.*

THE SERRATED MARGINELLA. Shell narrowly conical, somewhat fusiform, shining-white, spire rather obtuse, lip thickly reflected, denticulated within, columella four-plaited.

GASKOIN, MS. in Mus. Cuming.

Hab. West Indies.

Distinguished by a peculiar, fusiformly-conical growth, the lip being serrated with denticulations.

Species 125. (Mus. Bell.)

MARGINELLA PYGMÆA. *Marg. testâ obtusè conicâ, nitente-eburneâ, spirâ parvâ, anfractibus supernè tumido-rotundatis, labro crassè reflexo, columellâ quadriplicatâ.*

THE PYGMY MARGINELLA. Shell obtusely conical, shining ivory-white, spire small, whorls tumidly rounded at the upper part, lip thickly reflected, columella four-plaited.

SOWERBY, Thes. Conch. Marg. p. 386. pl. 75. f. 78, 79.

Hab. ——?

Distinguished by the full rotundity of the whorls round the upper part.

Species 126. (Mus. Cuming.)

MARGINELLA TRIPLICATA. *Marg. testâ tumido-pyriformi, carneo-albâ, nitente, spirâ parvâ, labro crassè reflexo, aperturâ parvâ, columellâ triplicatâ.*

THE THREE-PLAITED MARGINELLA. Shell tumidly pear-shaped, flesh-white, shining, spire small, lip thickly reflected, aperture small, columella three-plaited.

GASKOIN, MS. in Mus. Cuming.

Hab. Philippine Islands; Cuming.

A very characteristic Cowry-shaped species.

Species 127. (Mus. Taylor.)

MARGINELLA TERVERIANA. *Marg. testâ oblongo-ovatâ, crassâ, callosâ, nitente-albâ, spirâ immersâ, labro crassè varicoso, columellâ multiplicatâ.*

TERVER'S MARGINELLA. Shell oblong-ovate, thick, callous, shining-white, spire immersed, lip thickly varicose, columella many-plaited.

PETIT, Journ. Conch. vol. ii.

Hab. Red Sea.

A swollen, callous species, resembling the *Cypræa moneta* in general appearance.

Species 128. (Mus. Taylor.)

MARGINELLA VITREA. *Marg. testâ trigono-pyriformi, nitente-albâ, subvitreâ, spirâ obtusè conicâ, anfractibus supernè rotundato-angulatis, infernè constricto-attenuatis, labro varicoso-reflexo, aperturâ subpatulâ, columellâ quadriplicatâ, plicis subdistantibus.*

THE GLASSY MARGINELLA. Shell triangularly pear-shaped, shining-white, somewhat glassy, spire obtusely conical, whorls rotundately angled round the upper part, constrictedly attenuated at the lower part, lip varicosely reflected, aperture rather wide open, columella four-plaited, plaits rather distant.

HINDS, Pro. Zool. Soc. 1844, p. 75; Moll. Voy. Sulphur, pl. 13. f. 18, 19.

Hab. West Africa; Belcher.

A very distinct *Erato*-like species, of transparent, glassy whiteness.

Species 129. (Mus. Cuming.)

MARGINELLA OVULUM. *Marg. testâ ovatâ, Oviliformi, nitente-albâ, spirâ immersâ, anfractibus supernè productis, labro modicè incrassato, aperturâ curvatâ, columellâ quadriplicatâ.*

THE OVULUM MARGINELLA. Shell ovate, *Ovulum*-shaped, shining-white, spire immersed, whorls produced at the upper part, lip moderately thickened, aperture curved, columella four-plaited.

SOWERBY, Thes. Conch. Marg. p. 401. pl. 78. f. 188.

Hab. —— ?

The last whorl of this species is curved and produced over the spire, giving the shell the appearance of an *Ovulum*.

130.

131.a.

131.b.

132.

133.a.

133.b.

134.

135.

136.

137.

Sowerby, del et lith.

Vincent Brooks, Imp.

MARGINELLA.

PLATE XXIV.

Species 130. (Mus. Cuming.)

MARGINELLA COMPRESSA. *Marg. testâ cylindraceo-oblongâ, subangustâ, medio compressâ, nitente-albâ, vitreâ, spirâ parvâ, obtusâ, labro subincrassato, opaco, columellâ quadriplicatâ.*

THE COMPRESSED MARGINELLA. Shell cylindrically oblong, rather narrow, compressed in the middle, shining-white, glassy, spire small, obtuse, lip rather thickened, opake, columella four-plaited.

Hab. ——?

A narrow, cylindrical, glassy shell, compressed in the middle.

Species 131. (Mus. Taylor.)

MARGINELLA VOLUTIFORMIS. *Marg. testâ ovatâ, eburneâ, spirâ conicâ, anfractibus supernè tumidiusculis, labro varicoso-reflexo, columellâ quadriplicatâ.*

THE VOLUTE-SHAPED MARGINELLA. Shell ovate, ivory-white, spire conical, whorls rather swollen round the upper part, lip varicosely reflected, columella four-plaited.

Hab. ——?

A small ivory-white shell, presenting the typical form of a *Volute*.

Species 132. (Mus. Taylor.)

MARGINELLA OBSCURA. *Marg. testâ cylindraceo-oblongâ, rufescente-albâ, nitente, spirâ parvâ, labro subincrassato, rufo pallidè maculato, flexuoso, columellâ quadriplicatâ.*

THE OBSCURE MARGINELLA. Shell cylindrically oblong, reddish-white, shining, spire small, lip rather thick, faintly spotted with red, flexuous, columella four-plaited.

Hab. ——?

There is only a faint indication of colour in this species.

Species 133. (Mus. Taylor.)

MARGINELLA PAXILLUS. *Marg. testâ elongato-conicâ, pellucido-albâ, nitente, spirâ subexsertâ, anfractibus supernè tumidiusculis, infernè attenuatis, labro opaco, flexuoso, columellâ quadriplicatâ.*

THE PEG MARGINELLA. Shell elongately conical, transparent-white, shining, spire rather exserted, whorls rather swollen round the upper part, attenuated towards the lower part, lip opake, flexuous, columella four-plaited.

Hab. ——?

Of a distinct, elongately conical form, and transparent white substance.

Species 134. (Mus. Taylor.)

MARGINELLA CANDIDA. *Marg. testâ trigono-ovatâ, nitente-albâ, spirâ abbreviato-conicâ, anfractibus supernè gibboso-tumidis, labro varicoso-reflexo, intus denticulato, columellâ validè quadriplicatâ.*

THE WHITE MARGINELLA. Shell triangularly ovate, shining-white, spire shortly conical, whorls gibbously swollen round the upper part, lip varicosely reflected, toothed within, columella strongly four-plaited.

SOWERBY, Thes. Conch. Marg. p. 382. pl. 75. f. 86, 87.

Hab. ——?

Of a characteristic *Melampus*-like form.

Fig. 135. (Mus. Taylor.)

The shell here represented proves to be a small specimen of *M. lactea*, Kiener, described at Pl. XVII. Sp. 81.

Species 136. (Mus. Cuming.)

MARGINELLA AFFINIS. *Marg. testâ cylindraceâ, utrinque rotundatâ, pellucido-albâ, solidiusculâ, spirâ parvâ, labro flexuoso, columellâ quadriplicatâ.*

THE ALLIED MARGINELLA. Shell cylindrical, rounded at each end, transparent-white, rather solid, spire small, lip flexuous, columella four-plaited.

Hab. Island of Thomas, West Indies.

Resembling the preceding West India species in general aspect, but quite distinct. It is more obtusely rounded at the extremities, and has an additional plait upon the columella.

Species 137. (Mus. Cuming.)

Marginella sordida. *Marg. testâ angustè oblongâ, sordidè albâ, spirâ obtusè conicâ, labro varicoso-incrassato, columellâ triplicatâ.*

The sordid Marginella. Shell narrowly oblong, dull-white, spire obtusely conical, lip varicosely thickened, columella three-plaited.

Hab. ——?

Of a simple character, but distinct from any other species.

138.

139.a.

139.b.

140.a.

141.

142.

140.b.

143.a.

143.b.

144.

MARGINELLA.

PLATE XXV.

Species 138. (Mus. Cuming.)

MARGINELLA NEGLECTA. *Marg. testâ ovatâ, pellucido-albâ, spirâ turbinatâ, labro modicè incrassato, aperturâ versus basin latiusculâ, columellâ quadriplicatâ.*

THE NEGLECTED MARGINELLA. Shell ovate, transparent-white, spire turbinated, lip moderately thickened, aperture rather broad towards the base, columella four-plaited.

SOWERBY, Thes. Conch. Marg. p. 390. pl. 76. f. 135, 136.

Hab. ——?

The spire of this species is more exserted than is usual in this group of the genus.

Species 139. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA BULLULA. *Marg. testâ cylindraceo-oblongâ, pellucido-albâ, vitreâ, spirâ obtusè conicâ, labro flexuoso, columellâ quadriplicatâ.*

THE LITTLE BUBBLE MARGINELLA. Shell cylindrically oblong, transparent-white, glassy, spire obtusely conical, lip flexuous, columella four-plaited.

Hab. Borneo.

A glassy shell, of very simple typical character.

Species 140. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA OLIVELLA. *Marg. testâ oblongo-ovatâ, supernè subinflatâ, vitreo-albâ, spirâ parvâ, labro modicè incrassato, opaco, aperturâ latiusculâ, columellâ quadriplicatâ.*

THE LITTLE OLIVE MARGINELLA. Shell oblong-ovate, rather inflated towards the upper part, glassy-white, spire small, lip moderately thickened, opake, aperture rather wide, columella four-plaited.

Hab. Australia; Strange.

Distinguished by an inflated growth, which is more prominent round the base of the spire.

Species 141. (Mus. Bell.)

MARGINELLA INCONSPICUA. *Marg. testâ conico-ovatâ, solidiusculâ, nitente-albâ, spirâ parvâ, labro varicoso-incrassato, columellâ quadriplicatâ.*

THE INCONSPICUOUS MARGINELLA. Shell conically ovate, rather solid, shining-white, spire small, lip varicosely thickened, columella four-plaited.

SOWERBY, Thes. Conch. Marg. p. 387. pl. 75. f. 80.

Hab. ——?

Distinguished by a conical form, attenuately contracted at the base.

Species 142. (Mus. Bell.)

MARGINELLA EVANIDA. *Marg. testâ conico-ovatâ, sordidè albâ, pallidissimè bifasciatâ, spirâ subobtusâ, anfractibus supernè gibbosis, labro tumido-incrassato, columellâ quadriplicatâ.*

THE FADED MARGINELLA. Shell conically ovate, dull-white, very faintly two-banded, spire rather obtuse whorls gibbous round the upper part, lip tumidly thickened, columella four-plaited.

SOWERBY, Thes. Conch. Marg. p. 388. pl. 75. f. 69.

Hab. ——?

A very unsatisfactory and doubtful species, the shell being in bad condition.

Species 143. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA CORUSCA. *Marg. testâ ovatâ, versus basin subattenuatâ, pellucido-corneâ, lividâ, rufo pallidissimè bifasciatâ, spirâ obtusâ, labro varicoso-incrassato, columellâ quadriplicatâ.*

THE GLISTENING MARGINELLA. Shell ovate, slightly attenuated towards the base, transparent horny, livid, very faintly two-banded with red, spire obtuse, lip varicosely thickened, columella four-plaited.

Hab. Singapore.

A very characteristic, livid horny shell, faintly banded in two places with dark-red.

Species 144. (Mus. Cuming.)

MARGINELLA BULBOSA. *Marg. testâ tumido-ovatâ, opaco-albâ, spirâ minutâ, partim immersâ, anfractibus supernè solidè obtusis, labro modicè incrassato, columellâ quadriplicatâ.*

THE BULBOUS MARGINELLA. Shell tumidly ovate, opake-white, spire minute, partly immersed, whorls solidly obtuse round the upper part, lip moderately thickened, columella four-plaited.

Hab. Borneo.

A conical shell, particularly solid and obtuse round the upper part.

146.

146

147.

148.a.

149.a.

149.b.

148.b.

150.a.

150.b.

151.

MARGINELLA.

PLATE XXVI.

Species 145. (Mus. Taylor.)

MARGINELLA SEMEN. *Marg. testâ subpyriformi-ovatâ, sordidè albâ, spirâ minutâ, ferè immersâ, anfractibus supernè tumido-rotundatis, labro incrassato, columellâ callosâ, minutè quadriplicatâ.*

THE SEED MARGINELLA. Shell somewhat pyriformly ovate, dull white, spire minute, almost immersed, whorls tumidly rounded at the upper part, lip thickened, columella callous, minutely four-plaited.

Hab. ——?

A rather swollen species, with the spire but little apparent.

Species 146. (Mus. Cuming.)

MARGINELLA JEWETTII. *Marg. testâ obtusè conicâ, pellucido-albâ, spirâ partim immersâ, anfractibus supernè tumido-rotundatis, labro modicè incrassato, columellâ tumidâ minutè quadriplicatâ.*

JEWETT'S MARGINELLA. Shell obtusely conical, transparent-white, spire partly immersed, whorls tumidly rounded at the upper part, lip moderately thickened, columella tumid, minutely four-plaited.

CARPENTER, MS. in Mus. Cuming.

Hab. Santa Barbara, New California; Col. Jewett.

Somewhat like the preceding species, but rather more oblong, with the columellar plaits more defined.

Species 147. (Mus. Taylor.)

MARGINELLA ROS. *Marg. testâ obtusè conicâ, subpyriformi, spirâ partim immersâ, vitreo-albâ, labro modicè incrassato, columellâ calloso-tumidâ minutissimè plicatâ.*

THE DEW MARGINELLA. Shell obtusely conical, somewhat pear-shaped, spire partly immersed, glassy-white, lip moderately thickened, columella callously swollen, very minutely plaited.

Hab. ——?

A transparent, glassy shell, of a rather stout pear-shaped form.

Species 148. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA ENCAUSTICA. *Marg. testâ subpyriformi, solidâ, nitente-albâ, spirâ immersâ, anfractibus supernè tumido-gibbosis, labro crassè reflexo, intus minutè denticulato, columellâ calloso-tumidâ, multiplicatâ.*

THE ENAMELLED MARGINELLA. Shell somewhat pear-shaped, solid, shining-white, spire immersed, whorls tumidly gibbous round the upper part, lip thickly reflected, minutely denticulated within, columella callously swollen, many-plaited.

Hab. Ceylon.

A solid pear-shaped shell, rather rudely gibbous round the upper part.

Species 149. (Fig. *a*, *b*, Mus. Taylor.)

MARGINELLA RUFULA. *Marg. testâ ovato-turbinatâ, pellucidâ, vitreâ, rufulâ, fusco-rufo pallidè trifasciatâ, spirâ conico-exsertâ, labro parum incrassato, supernè emarginato, columellâ quadriplicatâ.*

THE RUFOUS MARGINELLA. Shell ovately turbinated, transparent, glassy, reddish, faintly three-banded with brown-red, spire conically exserted, lip but little thickened, notched at the upper part, columella four-plaited.

GASKOIN, MS. in Mus. Taylor.

Hab. Green Point, Cape of Good Hope; Benson.

A very characteristic *Volute*-shaped species, of a rufous, glassy substance, delicately pencilled with brown-red bands.

Species 150. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA INFANS. *Marg. testâ ovatâ, subconicâ, pellucido-albâ, pallidissimè fusco-bilineatâ, spirâ obtusâ, labro modicè incrassato, flexuoso, columellâ quadriplicatâ.*

THE SMALL MARGINELLA. Shell ovate, slightly conical, transparent-white, encircled with two faint-brown lines, spire obtuse, lip moderately thickened, flexuous, columella four-plaited.

Hab. Singapore.

Mostly encircled with two faint-brown lines.

Species 151. (Mus. Cuming.)

MARGINELLA EPIGRUS. *Marg. testâ subpyriformi-ovatâ, vitreo-albâ, spirâ parvâ, labro vix incrassato, columellâ calloso-tumidâ, quadriplicatâ*

THE PIN MARGINELLA. Shell somewhat pyriformly ovate, glassy-white, spire small, lip scarcely thickened, columella callously swollen, four-plaited.

Hab. Mogadore, Marocco; M'Andrew.

A solid, pear-shaped shell, but delicately transparent.

152.

153.

154.

155a.

156a.

156b.

155b.

157.

158.

159.

Sowerby, del. et lith.

Vincent Brooks, Imp.

MARGINELLA.

PLATE XXVII.

Species 152. (Mus. Cuming.)

MARGINELLA MINOR. *Marg. testâ oblongo-pyriformi, vitreo-albâ, spirâ subimmersâ, anfractibus supernè tumido-rotundatis, labro crassè reflexo, columellâ quadriplicatâ.*

THE SMALLER MARGINELLA. Shell oblong pear-shaped, glassy-white, spire nearly immersed, whorls tumidly rounded at the upper part, lip thickly reflected, columella four-plaited.

C. B. ADAMS, Panama Shells.

Hab. Panama. Mazatlan.

A very minute, glassy species, of an oblong pear-shape.

Species 153. (Mus. Taylor.)

MARGINELLA LAVALLEANA. *Marg. testâ cylindraceo-pyriformi, vitreo-albâ, tenui, spirâ obtusâ, labro parum incrassato, columellâ quadriplicatâ.*

LAVALLE'S MARGINELLA. Shell cylindrically pear-shaped, glassy-white, thin, spire obtuse, lip but little thickened, columella four-plaited.

D'ORBIGNY, Brit. Mus. Cat. Cuba, Moll. p. 25.
Marginella minima, Guilding (ined.).

Hab. Cuba.

Very thin and glassy, the columellar axis being visible throughout.

Species 154. (Mus. Taylor.)

MARGINELLA MILIARIA. *Marg. testâ obovatâ, vitreo-albâ, spirâ immersâ, aperturâ curvatâ, columella quadriplicatâ.*

THE LINNET MARGINELLA. Shell obovate, glassy-white, spire immersed, aperture curved, columella four-plaited.

Voluta miliaria, Linnæus, Syst. Nat. p. 1139.
Volvaria miliacea, Lamarck.

Hab. Mediterranean. Guancha, Madeira; M'Andrew.

This little species has an inclination to an ovuloid growth.

Species 155. (Mus. Taylor.)

MARGINELLA STRIATA. *Marg. testâ ovato-turbinatâ, albidâ, spirâ conspicuè exsertâ, anfractibus supernè rotundatis, longitudinaliter lirato-striatâ, labro crassè reflexo, columellâ quadriplicatâ.*

THE STRIATED MARGINELLA. Shell turbinately ovate, whitish, spire conspicuously exserted, whorls rounded at the upper part, longitudinally ridge-striated, lip thickly reflected, columella four-plaited.

SOWERBY, Thes. Conch. Marg. p. 375. pl. 75. f. 81, 82.

Hab. —— ?

A minute, *Volute*-shaped shell, strongly sculptured longitudinally, with raised striæ.

Species 156. (Fig. *a*, *b*, Mus. Cuming.)

MARGINELLA PISUM. *Marg. testâ globosâ, Ovuliformi, nitente-albâ, spirâ immersâ, anfractibus modicè inflatis, labro tenuè reflexo, aperturâ curvatâ, columellâ quadriplicatâ.*

THE PEA MARGINELLA. Shell globose, *Ovulum*-shaped, shining-white, spire immersed, whorls moderately inflated, lip thinly reflected, aperture curved, columella four-plaited.

Hab. Australia; Strange.

A very characteristic, *Ovulum*-shaped species, of about the size of a small pea.

Species 157. (Mus. Cuming.)

MARGINELLA SANDWICENSIS. *Marg. testâ oblongo-ovatâ, nitente-albâ, spirâ parvâ, anfractibus versus basin subcontractis, labro modicè reflexo, columellâ quadriplicatâ.*

THE SANDWICH MARGINELLA. Shell oblong-ovate, shining-white, spire small, whorls rather contracted towards the base, lip moderately reflected, columella four-plaited.

PEASE, Pro. Zool. Soc. 1860, p. 147.

Hab. Sandwich Islands; Pease.

More than usually oblong and contracted than the other small white species of the genus.

Species 158. (Mus. Taylor.)

MARGINELLA BENSONI. *Marg. testâ subtrigono-oblongâ, solidiusculâ, nitente-albâ, spirâ parvâ, anfractibus supernè tumidiusculis, labro modicè reflexo, columellâ triplicatâ.*

BENSON'S MARGINELLA. Shell somewhat triangularly oblong, rather solid, shining-white, spire small, whorls rather swollen round the upper part, lip moderately reflected, columella three-plaited.

Hab. Green Point, Cape of Good Hope; Benson.

Very like the preceding species, but of rather larger size and straighter growth.

Species 159. (Mus. Cuming.)

MARGINELLA LACHRYMA. *Marg. testâ subpyriformi-ovatâ, vitreo-albâ, spirâ immersâ, anfractibus supernè obtusè rotundatis, labro parum incrassato, aperturâ subcurvatâ, columellâ multiplicatâ.*

THE TEAR MARGINELLA. Shell somewhat pyriformly ovate, glassy-white, spire immersed, whorls obtusely rounded at the upper part, lip but little reflected, aperture slightly curved, columella many-plaited.

Hab. Borneo.

A glassy, pear-shaped shell, of quite a distinct type.

MARGINELLA.

	Plate.	Species.
Adansoni, *Kiener*	VII.	27
affinis, *Reeve*	XXIV.	136
alabaster, *Reeve*	XXI.	107
albina, Gaskoin	XXII.	122
albocincta, *Sowerby*	XIX.	95
amabilis, Redfield	XII.	51
amygdala, *Kiener*	XI.	43
angustata, *Sowerby*	XIII.	55
annulata, *Reeve*	XXII.	119
apicina, Menke	XVIII.	87
attenuata, *Reeve*	XXII.	116
aurantia, *Lamarck*	V.	16
australis, *Hinds*	XVI.	74
avena, *Valenciennes*	XVII.	83
Belcheri, *Hinds*	IX.	33
Bellii, *Sowerby*	VIII.	32
Bensoni, *Reeve*	XXVII.	158
Bernardii, *Largillier*	X.	38
Beyerleana, Bernardi	XVII.	83
bibalteata, *Reeve*	XX.	99
bifasciata, *Lamarck*	VII.	25
bivaricosa, Lamarck	XI.	46
Bobi, De Blainville	XIII.	56
bulbosa, *Reeve*	XXV.	144
bullata (*Voluta*), Born	I.	2
bullula, *Reeve*	XXV.	139
Burchardi, *Dunker*	II.	3
candida, *Sowerby*	XXIV.	134
cantharus, *Reeve*	XXI.	110
Capensis, *Dunker*	XXI.	113
carnea, Storer	XII.	51
catenata (*Voluta*), Montagu	XVI.	72
chrysomelina, *Redfield*	XXII.	121
cincta, *Kiener*	XI.	44
cingulata (*Voluta*), Dillwyn	XIII.	56
Cleryi, *Petit*	IX.	37
cæruleseens, Lamarck	XI.	45
compressa, *Reeve*	XXIV.	130
conoidalis, *Kiener*	XVIII.	87
constricta, *Hinds*	XIX.	96
cornea, *Lamarck*	XII.	52
corusca, *Reeve*	XXV.	143
crassilabrum, *Sowerby*	XVIII.	92
Cumingiana, *Petit*	III.	8
curta, *Sowerby*	VI.	23
cylindrica, Pease	XXI.	108
cylindrica, *Sowerby*	XX.	105
dactylus, *Lamarck*	X.	42
De Burghiæ, *Adams*	XV.	68
dens, *Reeve*	XXII.	120
diadochus, *Adams and Reeve*	IX.	35
diaphana, *Kiener*	XVI.	76
effulgens, *Reeve*	XX.	104
electrum, *Reeve*	XXII.	118
elegans (*Voluta*), Gmelin	II.	4
encaustica, *Reeve*	XXVI.	148
epigrus, *Reeve*	XXVI.	151
evanida, *Sowerby*	XXV.	142
faba (*Voluta*), Linnæus	VII.	24
fasciata (*Persicula*), Schumacher	XIII.	57
festiva, *Kiener*	XIX.	93
formicula, *Lamarck*	VIII.	28
frumentum, *Sowerby*	XV.	71
fulminata, *Kiener*	XIII.	54
fusca, *Sowerby*	XVII.	82
fusiformis, *Hinds*	XVII.	79
gemma, Adams	XIX.	94
glabella (*Voluta*), Linnæus	I.	1
Goodalli, *Sowerby*	III.	9
guttata, Swainson	XV.	65
guttata (*Voluta*), Dillwyn	XII.	50
guttula, *Reeve*	XX.	101
Hainesii, Petit	X.	41
harpæformis, *Beck*	VIII.	31
helmatina, *Rang*	III.	7
Hondurasensis, *Reeve*	XIX.	97
imbricata, *Hinds*	XIV.	59
immersa, *Reeve*	XXI.	109
inconspicua, *Sowerby*	XXV.	141
infans, *Reeve*	XXVI.	150
inflexa, *Sowerby*	XX.	106
interrupta, *Lamarck*	XIV.	62
irrorata, *Menke*	V.	18
Jewettii, *Carpenter*	XXVI.	146
Kieneriana, *Petit*	XIV.	63
labiata, *Valenciennes*	VI.	21
lachryma, *Reeve*	XXVII.	159
lactea, *Kiener*	XVII.	81
Lavalleana, *D'Orbigny*	XXVII.	153
lilacina, *Sowerby*	XIV.	60
limbata, *Lamarck*	III.	10
Largillieri, *Kiener*	VI.	22
lineata, Lamarck	XIII.	56
livida, *Reeve*	XX.	100
longivaricosa, Lamarck	XII.	50
Loroisii, Bernardi	XVIII.	90
maculosa, *Kiener*	XV.	65
margarita, *Kiener*	XVI.	78
marginata (*Voluta*), Born	XI.	46
miliacea (Volvaria), Lamarck	XXVII.	154
miliaria, Sowerby	XVI.	75
milaria (*Voluta*), Linnæus	XXVII.	154

	Plate.	Species.
minima, Guilding	XXVII.	153
minor, *C. B. Adams*	XXVII.	152
monilis (*Voluta*), Born	XXI.	111
mosaica, *Sowerby*	IV.	12
multilineata, *Sowerby*	XIV.	64
muralis, *Hinds*	XV.	69
muscaria, *Lamarck*	VIII.	29
musica, *Hinds*	IX.	34
navicella, *Reeve*	XX.	103
neglecta, *Sowerby*	XXV.	138
Newcombi, *Reeve*	V.	15
nitida, *Hinds*	XVII.	80
nivosa, *Hinds*	VI.	20
nodata, *Hinds*	IX.	36
nubeculata, Lamarck	IV.	13
oblonga, *Swainson*	XII.	51
obscura, *Reeve*	XXIV.	132
olivæformis, *Kiener*	VI.	19
olivella, *Reeve*	XXV.	140
onychina, Adams and Reeve	X.	38
oryza, Pease	XVI.	74
oryza (*Volvaria*), Lamarck	XVI.	75
Ovulum, *Sowerby*	XXIII.	129
ovum, *Reeve*	XVIII.	89
pallida (*Bulla*), Linnæus	XVII.	86
paxillus, *Reeve*	XXIV.	133
Peasii, *Reeve*	XXI.	108
pellucida, Pfeiffer	XVI.	76
persicula (*Voluta*), Linnæus	XIII.	57
Petitii, *Duval*	III.	6
Philippinarum, *Redfield*	XVII.	84
phrygia, *Sowerby*	XV.	67
picta (Voluta), Gmelin	IV.	13
piperata, *Hinds*	IV.	11
pisum, *Reeve*	XXVII.	156
porcellana (*Voluta*), Chemnitz	XIII.	53
pruinosa, *Hinds*	XVIII.	88
prunum (*Voluta*), Gmelin	XI.	45
pseudo-faba, *Sowerby*	VII.	26
pulchella, *Kiener*	XV.	66
pulchra, *Gray*	X.	39
pygmæa, *Sowerby*	XXIII.	125
pyrulum, *Reeve*	XXII.	117
pyrum (*Voluta*), Gronovius	IV.	13
quadrilineata, *Reeve*	XII.	48
quinqueplicata, *Lamarck*	X.	40
Reeveana, Petit	VIII.	30
ros, *Reeve*	XXVI.	147
rosea, *Lamarck*	IV.	14
rufescens, *Reeve*	XXI.	112
rufula, *Gaskoin*	XXVI.	149
sagittata, *Hinds*	XV.	70
Sandwicensis, *Pease*	XXVII.	157
sapotilla, *Hinds*	XI.	47
sarda, *Kiener*	XVIII.	91
Saulcyana, *Petit*	XVIII.	90
scripta, *Hinds*	XIV.	58
semen, *Reeve*	XXVI.	145
serrata, *Gaskoin*	XXIII.	124
similis, *Sowerby*	XIV.	61
simplex, *Reeve*	XXII.	115
sordida, *Reeve*	XXIV.	137
splendens, *Humphreys*	VIII.	30
striata, *Sowerby*	XXVII.	155
strigata (Voluta), Dillwyn	II.	5
Terveriana, *Petit*	XXIII.	127
tessellata, Lamarck	XIII.	53
tæniata, *Sowerby*	XVII.	85
Traillii, *Reeve*	XXI.	114
tribalteata, *Reeve*	XX.	102
tricincta, *Hinds*	XII.	49
triplicata, *Gaskoin*	XXIII.	126
turbinata, *Sowerby*	XXII.	122
undulata (*Voluta*), Chemnitz	II.	5
varia, Sowerby	XVII.	83
vexillum, *Redfield*	XIX.	98
vitrea, *Hinds*	XXIII.	128
vittata, *Reeve*	V.	17
Volutiformis, *Reeve*	XXIV.	131
zonata, *Kiener*	XVI.	77

ERRATUM.

Pl. XXIII. Sp. 123. *M. margarita.* also at Pl. XVI. Sp. 78. This species has been inadvertently inserted twice. It is described and figured *Hab.* India, in the second insertion, should be *Hab.* West Indies.

MONOGRAPH

OF THE GENUS

ANCILLARIA.

"The shell from the bright golden sands of the ocean,
Which the emerald-waves at your feet gladly threw."—*Keats.*

1.a.

2.a.

1.b.

2.b.

Sowerby del. et lith.

Vincent Brooks Imp.

ANCILLARIA.

PLATE I.

Genus ANCILLARIA, *Lamarck*.

Testo raro umbilicata, fusiformi-oblonga vel ovata, interdum ventricosa, plerumque crassa, suturis valde callosis, basi latè emarginatâ, columellâ sæpissime constricto-contortâ. Operculum corneum, parvum.

Shell rarely umbilicated, fusiformly oblong or ovate, sometimes ventricose, generally thick, with the sutures very callous, base broadly emarginated, columella mostly constrictedly twisted. Operculum horny, small.

Of this beautiful genus, founded by Lamarck under the name of *Ancilla*, which he afterwards changed to *Ancillaria*, only five species were known until it attracted the attention of Mr. Swainson, who added ten others. To these Mr. G. B. Sowerby, senior and junior, added considerably, but with very imperfect information as to the native habitats of the species. The following monograph comprises fifty species, of which all the habitats are recorded, with a few comparatively unimportant exceptions.

There are several distinct types of form in this genus. Two are characterized by an elegant fusiform growth, each having the sutures of the whorls overlaid by a coating of callous enamel. In one of these forms (*A. cingulata*) the enamel is merely a thin superficial layer; in the other, which is more numerous in species, the enamel is firm (as in *A. Vernedei*), but more commonly thickens by its superfluity into a rude callous mass, resulting apparently from a peculiarity in the animal. M. Quoy observed that the shell is partially imbedded in the substance of the disk, the middle portion of which is often reflected over the edge, and hence arises that callous deposit of shell which is so conspicuous in *A. obtusa*, *mamillata*, *rubiginosa*, *Montrouzieri*, and others. Another very different form of *Ancillaria* is that represented by *A. torosa* and *ventricosa*, in which the shell is openly convoluted, with only a moderate exsertion of spire. Lastly, and most distinct of all because umbilicated, which is not the case with any other species, we have the well-known *A. glabrata*, referred by Lamarck to *Eburna*.

All the *Ancillariæ* are inhabitants of the Eastern Hemisphere, excepting *A. glabrata* and *Lienardi*, belonging to the abnormal type just referred to (*Dipsaccus*, Klein), natives respectively of the Gulf of Mexico and Pernambuco, and a single species of an Old World type, *A. Tankervillii*, recorded as a native of the Caribbean Sea. This, it will be seen, is a very unusual and remarkable exception, as the species is identical in general character with species inhabiting China and North Australia. But the geographical distribution of the *Ancillariæ* is altogether peculiar. Mr. Cuming never met with the genus in all his dredgings, except in the form of a single small species at the Philippine Islands, *A. Tronsoni*. China and Malacca contribute five species, and we have four from the Moluccas, Madagascar, Mauritius, and the Cape of Good Hope. About a dozen are recorded as natives of Australia, New Zealand, and New Caledonia, and another dozen, including the species of the *A. ventricosa* and *cinnamomea* type, are from the Red Sea and Zanzibar.

Species 1. (Mus. Taylor.)

ANCILLARIA VERNEDEI. *Anc. testâ eleganter fusiformi, ventricosiusculâ, pallidè fulvo-aurantiâ, infra albifasciatâ, circa suturas callosâ et ustulato-rufâ, spirâ subacuminatâ, columellâ modicè contortâ.*

VERNEDE'S ANCILLARIA. Shell elegantly fusiform, rather ventricose, pale fulvous-orange, white-banded below, callous and burnt-red about the sutures, spire rather acuminated, columella moderately twisted.

SOWERBY, Thes. Conch. Anc. p. 63. pl. 211. f. 7.

Hab. China Seas?

This fine shell, formerly in the possession of Mr. Vernede, is believed to be from China. It is the only specimen of the species known.

Species 2. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Taylor.)

ANCILLARIA TANKERVILLII. *An. testâ fusiformi-oblongâ, modicè ventricosâ, aurantio-lutescente, circa suturas saturatiore, columellâ valde contortâ.*

TANKERVILLE'S ANCILLARIA. Shell fusiformly-oblong, moderately ventricose, orange-yellow, darker about the sutures, columella much twisted.

SWAINSON, Journ. Sci. Lit. and Arts, vol. xviii. p. 283.

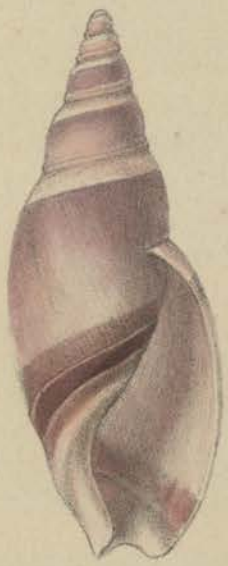
Hab. Island of Curaçoa, Caribbean Sea.

In this species the spire is less acuminated, and the columella is more twisted.

3a.

3b.

3c.



4a.

5a.

5b.

4b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

ANCILLARIA.

PLATE II.

Species 3. (Fig. *a*, *b*, *c*, Mus. Taylor.)

ANCILLARIA MAMILLATA. *Anc. testâ subacuminato-fusiformi, solidiusculâ, rufescente-spadiceâ, supra et infra saturatiore, interdum subrosaceâ, anfractibus superioribus plus minus confertim spiraliter sulcatis, apice sæpissimè calloso.*

THE MAMILLATED ANCILLARIA. Shell rather acuminately fusiform, rather solid, reddish-fawn, darker above and below, sometimes pinkish, upper whorls more or less closely spirally grooved, apex generally callous.

HINDS, Moll. Voy. Sulphur, pl. 11. f. 7, 8.

Hab. Straits of Malacca (at the depth of seventeen fathoms); Belcher.

In this species the animal deposits an unusual quantity of callous enamel on the upper whorls, reaching often to the apex.

Species 4. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Taylor.)

ANCILLARIA CINGULATA. *Anc. testâ subelongato-fusiformi, tenui, modicè ventricosâ, pallidè purpurascente-cinnamomeâ, ad suturas opaco-albâ, ad basin vividè ustulato-brunneo fasciatâ, columellâ arcuato-contortâ, opaco-albâ.*

THE GIRDLED ANCILLARIA. Shell rather elongately fusiform, thin, moderately ventricose, pale purple cinnamon-colour, opaque-white at the sutures, banded with bright burnt-brown at the base, columella arcuately twisted, opaque-white.

SOWERBY, Thes. Conch. Anc. p. 62. pl. 213. f. 54.

Hab. Cape York and Torres Straits, North Australia.

This beautiful species is girdled at the base with a conspicuous burnt-brown band, of which the lower half is enamelled of a rich sienna colour.

Species 5. (Mus. Cuming.)

ANCILLARIA RUBIGINOSA. *Anc. testâ subangustè fusiformi, solidâ, cinnamomeo-fuscâ, ad suturas callosâ, spirâ acuminatâ, callosâ.*

THE RUDDY ANCILLARIA. Shell somewhat narrowly fusiform, solid, cinnamon-brown, callous at the sutures, spire acuminated, callous.

SWAINSON, Zool. Illus. vol. ii. pl. 4.

Hab. China; Madagascar.

A fine, callous species of solid growth, characterized by a uniform colour of livid cinnamon-brown.

November, 1864.

6.a.

7.a.

7.b.

6.b.

8.a.

8.b.

6.c.

Sowerby, del et lith.

Vincent Brooks, Imp.

ANCILLARIA.

PLATE III.

Species 6. (Fig. *a*, *b*, *c*, Mus. Taylor.)

ANCILLARIA OBTUSA. *Anc. testâ oblongo-ovatâ, subpyriformi, versus apicem crassè calloso-obtusâ, apice interdum minutè acuto, aurantiâ vel cærulescente, callositate castaneo tinctâ, columellâ arcuatâ, parum contortâ.*

THE OBTUSE ANCILLARIA. Shell oblong-ovate, somewhat pear-shaped, thickly callously obtuse towards the apex, apex sometimes minutely sharp, orange or bluish, callosity tinged with chestnut, columella arched, but little twisted.

SWAINSON, Journ. Sci. Lit. and Arts, vol. xviii. p. 282.

Hab. Albany, Cape of Good Hope.

Distinguished by a remarkable superfluity of callous enamel around the spire, imparting an obtuse, round-shouldered form to the shell.

Species 7. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA AUSTRALIS. *Anc. testâ subfusiformi-ovatâ, versus apicem calloso-obtusâ, apice subacuminato, plumbeo-cæruleâ, callositate castaneo tinctâ, columellâ constricto-contortâ.*

THE SOUTHERN ANCILLARIA. Shell somewhat fusiformly ovate, callously obtuse towards the apex, apex rather acuminated, leaden-blue, callosity tinged with chestnut, columella constrictedly twisted.

SOWERBY, Thes. Conch. Anc. p. 63. pl. 211. f. 1, 2.
Ancillaria depressa, Sowerby.

Hab. New Zealand.

This species resembles certain varieties of the *A. obtusa* in its callous deposits and colouring, but the spire is more acuminated, and the columella has a peculiarly constricted growth.

Species 8. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA MARGINATA. *Anc. testâ ovato-fusiformi, ventricosiusculâ, spirâ acuminatâ, liratâ, lutescente-aurantiâ, anfractibus lævibus, supernè latè calloso-marginatis, callositate aurantio-fusco tinctâ, columellâ abbreviato-contortâ.*

THE MARGINED ANCILLARIA. Shell ovately-fusiform, rather ventricose, spire acuminated, ridged, yellowish-orange, whorls smooth, broadly callously margined at the upper part, callosity stained with orange-brown, columella shortly twisted.

LAMARCK, Anim. sans vert. vol. x. p. 591.

Hab. Port Phillip, New South Wales.

Of rather light substance, neatly margined at the sutures, with a rather broad, callous band and spiral ridge, the ridge being gradually more defined as it reaches the apex.

November, 1864.

9.a.

9.b.

9.c.

10.a.

11.a.

10.b.

11.b.

Sowerby, del. et. lith.

Vincent, Brooks, Imp.

ANCILLARIA.

PLATE IV.

Species 9. (Fig. *a*, Mus. Taylor; Fig. *b*, *c*, Mus. Cuming.)

ANCILLARIA MONTROUZIERI. *Anc. testâ subcylindraceo-oblongâ, versus apicem valde callosâ, pallidè rosaceo-spadiceâ, callositate subsaturatiore, apice parvo, acuto, columellâ arcuatâ, parum contortâ.*

MONTROUZIER'S ANCILLARIA. Shell somewhat cylindrically-oblong, very callous towards the apex, pale pinkish-fawn colour, callosity slightly darker, apex small, sharp, columella arched, but little twisted.

SOWERBIE, Journ. Conch. vol. 8. p. 207. pl. 9. f. 3.

Hab. Loyalty Island, New Caledonia.

A solid, cylindrically-oblong species, distinguished by a peculiarly delicate rose-tinted fawn colour, the callosity being very little darker in tone than the body-whorls.

Species 10. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA MUCRONATA. *Anc. testâ subcylindraceo-oblongâ, crassâ, versus apicem valde callosâ, apice parvo, mucronato, rosaceo-spadiceâ, callositate fuscâ, columellâ arcuato-contortâ.*

THE POINTED ANCILLARIA. Shell somewhat cylindrically oblong, thick, very callous towards the apex, apex small, pointed, rose-tinted fawn-colour, callosity fuscous, columella arcuately twisted.

SOWERBY, Thes. Conch. Anc. p. 63. pl. 211. f. 11, 12.

Hab. Tasmania.

Very like the preceding species, but of larger growth and more opaque colour; the columella is also more twisted.

Species 11. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA PYRAMIDALIS. *Anc. testâ ovatâ, tenuiculâ, ventricosâ, purpurascente-spadiceâ, callositate fuscâ, spirâ pyramidali-acuminatâ, undique callosâ, columellâ arcuato-contortâ.*

THE PYRAMIDAL ANCILLARIA. Shell ovate, rather thin, ventricose, purplish-fawn colour, callosity fuscous, spire pyramidally acuminated, callous throughout, columella arcuately twisted.

Hab. New Zealand.

The shells of this type of the genus are for the most part of very solid substance, but this is rather light and ventricose, with its callous spire peculiarly pyramidally acuminated.

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13. a.

12. a.

13. b.

14. a.

14. b.

14. c.

12. b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

ANCILLARIA.

PLATE V.

Species 12. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA SIMILIS. *Anc. testâ fusiformi-oblongâ, tenuiculâ, candidâ, spirâ acuminatâ, callositate latiusculâ; aperturâ angustâ, columellâ arcuatâ, parum contortâ.*

THE SIMILAR ANCILLARIA. Shell fusiformly-oblong, rather thin, white, spire acuminated, callosity rather broad; aperture narrow, columella arched, but little twisted.

SOWERBY, Thes. Conch. Anc. p. 64. pl. 211. f. 17.

Hab. Torres Straits, North Australia.

A colourless shell of light growth, distinguished by a characteristic acuminately-oblong form.

Species 13. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA ELONGATA. *Anc. testâ acuminato-elongatâ, tenui, ventricosâ, candidâ, spirâ acuminatâ, callositate supra et infra lævigatâ, nitente-eburneâ; aperturâ angustâ, columellâ subrectâ.*

THE ELONGATED ANCILLARIA. Shell acuminately elongated, thin, ventricose, white, spire acuminated, callosity above and below smooth, shining ivory; aperture narrow, columella nearly straight.

GRAY, Sow. Thes. Conch. Anc. p. 62. f. 52, 53.

Hab. —— ?

Unlike other species of this form, there are no spiral ridges at the base of the shell. The callosity, both above and below the whorls, is of ivory smoothness.

Species 14. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA TOROSA. *Anc. testâ ovatâ, tenuiculâ, ventricosâ, aurantio-lutescente vel cinnamomeâ, spirâ brevissimâ, partim immersâ, suturâ calloso-canaliculatâ; aperturâ patulâ, columellâ subcontortâ, eburneâ.*

THE MUSCULAR ANCILLARIA. Shell ovate, rather thin, ventricose, orange-yellow or cinnamon colour, spire very short, partially immersed, suture callously channelled; aperture widely opened, columella slightly twisted, ivory-white.

MEUSCHEN, Sow. Thes. Conch. Anc. p. 58. f. 30–32.
Ancillaria Mauritiana, Sowerby.
Ancillaria volutella, Deshayes.

Hab. Madagascar; Mauritius.

This well-known species, of light, inflated growth, is always distinguished by a peculiarly shining-white columella.

15.a.

15.b.

15.c.

16.a.

17.a.

17.b.

16.b.

18.a.

18.b.

18.c.

Sowerby, del. et. lith.

Vincent Brooks, Imp

ANCILLARIA.

PLATE VI.

Species 15. (Fig. *a*, *b*, *c*, Mus. Cuming.)

ANCILLARIA VENTRICOSA. *Anc. testâ ovatâ, crassiusculâ, ventricosâ, cinnamomeâ vel cinnamomeo-rufâ, spirâ abbreviato-acuminatâ, anfractibus supernè declivibus, columellâ truncato-contortâ, eburneâ.*

THE VENTRICOSE ANCILLARIA. Shell ovate, rather thick, ventricose, cinnamon or cinnamon-red, spire shortly acuminated, whorls sloping round the upper part, columella truncately twisted, ivory-white.

LAMARCK, Anim. sans vert. vol. x. p. 590.

Hab. Red Sea.

This well-known species varies in colour from a dark cinnamon to a cinnamon-red, but the red never approaches the peculiar orange-red of *A. aperta*.

Species 16. (Fig. *a*, *b*, Mus. Taylor.)

ANCILLARIA APERTA. *Anc. testâ oblongo-ovatâ, naviformi, inflatâ, aurantio-rufâ, spirâ brevi, subimmersâ, suturis subcallosis, anfractibus supernè obtusè angulatis, columellâ subcontortâ, eburneâ.*

THE OPEN ANCILLARIA. Shell oblong-ovate, boat-shaped, inflated, orange-red, spire short, partially immersed, sutures rather callous, whorls obtusely angled at the upper part, columella slightly twisted, ivory-white.

SOWERBY, Tankerville Cat. App. p. 32.

Hab. Zanzibar.

An oblong boat-shaped species of great rarity, distinguished by a peculiar orange-red colour.

Species 17. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA CASTANEA. *Anc. testâ ovatâ, crassiusculâ, ventricosâ, cinnamomeo-fuscâ, spirâ abbreviato-acuminatâ, anfractibus supernè declivibus, deinde tumidis, ad basin sulcatis, columellâ truncato-contortâ, eburneâ; aperturâ ad basin dentatâ.*

THE CHESTNUT ANCILLARIA. Shell ovate, rather thick, ventricose, cinnamon-brown, spire shortly acuminated, whorls sloping at the upper part, then tumid, grooved at the base, columella truncately twisted, ivory-white; aperture toothed at the base.

SOWERBY, Spec. Conch. p. 5. f. 20–23.

Hab. Red Sea.

Very like *A. ventricosa*, but distinguished by the presence of a constricted groove round the base, which developes a small tooth on the margin of the aperture.

Species 18. (Fig. *a*, *b*, *c*, Mus. Cuming.)

ANCILLARIA FULVA. *Anc. testâ ovatâ, crassâ, callosâ, fulvo-fuscescente, interdum carneâ, opaco-albo strigatâ, spirâ brevi, anfractibus declivi-convexis, columellâ truncato-contortâ, albâ.*

THE FULVOUS ANCILLARIA. Shell ovate, thick, callous, fulvous-brown, sometimes flesh-tinted, streaked with opaque-white, spire short, whorls slopingly convex, columella truncately twisted, white.

SWAINSON, Journ. Sci. Lit. and Arts, No. 36.

Ancillaria variegata, Sowerby.

Hab. Red Sea.

Of a thicker and more callous growth than *A. ventricosa*, muddy-fulvous in colour, passing to a bright flesh-tint streaked with opake-white.

November, 1864.

19. a.

20. a.

20. b.

19. b.

21. a.

21. b.

19. c.

22. a.

22. b.

23.

Sowerby, del. et. lith.

Vincent Brooks, Imp.

ANCILLARIA

PLATE VII.

Species 19. (Fig. *a*, *b*, Mus. Cuming; Fig. *c*, Mus. Taylor.)

ANCILLARIA CINNAMOMEA. *Anc. testâ acuminato-ovatâ, cinnamomeâ vel cinnamomeo-aurantiâ, spirâ brevi, acuminatâ, callosâ, obscurè albifasciatâ, anfractibus supernè declivi-contractis, infernè constrictis et sulcatis, columellâ truncato-contortâ; aperturâ ad basin minutè dentatâ.*

THE CINNAMON ANCILLARIA. Shell acuminately ovate, cinnamon or cinnamon-orange, spire short but acuminated, callous, obscurely white-banded, whorls slopingly contracted at the upper part, constricted and grooved at the lower, columella truncately twisted; aperture minutely toothed at the base.

LAMARCK, Anim. sans vert. vol. x. p. 589.
Bulla Cypræa?, Linnæus.
Ancilla brunnea, Schumacher.
Anaulax cinnamomea, Roissy.
Ancillaria effusa, Swainson.
Hab. Red Sea.

Of a narrower, more acuminated form than any of the allied species in the preceding Plate, with colour of a characteristic orange-cinnamon hue, inclined to be white-banded towards the apex.

Species 20. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA ALBIFASCIATA. *Anc. testâ ovatâ, subventricosâ, luteo-aurantiâ, ad suturas albifasciatâ, spirâ brevi, anfractibus cylindraceis, infernè constrictis et sulcatis, columellâ truncato-contortâ; aperturâ ad basin minutè dentatâ.*

THE WHITE-BANDED ANCILLARIA. Shell ovate, somewhat ventricose, yellowish-orange, banded with white at the sutures, spire short, whorls cylindrical, constricted and grooved at the lower part, columella truncately twisted; aperture minutely toothed at the base.

SWAINSON, Journ. of Sci. Lit. and Arts, No. 36.
Hab. Red Sea.

This comes very near to the pale varieties of *A. cinnamomea*, and must be regarded as a doubtful species.

Species 21. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA ACUMINATA. *Anc. testâ acuminato-oblongâ, fulvo-spadiceâ, ad basin saturatiore, spirâ elevatâ, anfractibus supernè declivibus, deinde tumidiusculis, infernè constrictis et sulcatis, sulco albo, columellâ contortâ, eburneâ; aperturâ ad basin minutè dentatâ.*

THE ACUMINATED ANCILLARIA. Shell acuminately oblong, fulvous-drab, darker at the base, spire raised, whorls sloping at the upper part, then a little tumid, constricted and grooved at the lower part, groove white, columella twisted, ivory-white; aperture minutely toothed at the base.

SOWERBY, Thes. Conch. Anc. p. 59. pl. 214. f. 66, 67.
Hab. Zanzibar.

A very characteristic well-defined species.

Species 22. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA ALBISULCATA. *Anc. testâ ovatâ, cinnamomeo-spadiceâ, ad basin saturatiore, spirâ parvâ, anfractibus subventricosis, infernè sulcatis, sulco albo, columellâ contortâ, eburneâ; aperturâ ad basin dentatâ.*

THE WHITE-GROOVED ANCILLARIA. Shell ovate, cinnamon-drab, darker at the base, spire small, whorls slightly ventricose, grooved at the lower part, groove white, columella twisted, ivory-white; aperture toothed at the base.

SOWERBY, Thes. Conch. p. 4. f. 14–19.
Hab. Red Sea.

The style of colouring, so far as regards the darker base, edged with a white groove, resembles that of *A. acuminatâ*; the form of the species is quite distinct.

Species 23. (Mus. Cuming.)

ANCILLARIA DESHAYESII. *Anc. testâ ovatâ, lutescente, spirâ subacuminatâ, anfractibus supernè constrictis, infernè sulcatis, columellâ truncato-contortâ; aperturâ ad basin minutè dentatâ.*

DESHAYES' ANCILLARIA. Shell ovate, yellowish, spire rather acuminated, whorls constricted round the upper part, grooved at the lower part, columella truncately twisted; aperture minutely toothed at the base.

ADAMS, Sowerby, Thes. Conch. p. 60. pl. 214. f. 68, 69.
Hab. Moluccas.

This is not a very satisfactory species, but I am still unable to refer it to any other.

24.a.

25.a.

25.b

24.b.

26.a.

26.b.

27.a.

28.a.

28.b.

27.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

ANCILLARIA.

PLATE VIII.

Species 24. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA OBLONGA. *Anc. testâ subfusiformi-oblongâ, purpurascente-spadiceâ, callositate lacteâ rufo-flammatâ ad suturas fasciatâ, spirâ acuminatâ, columellâ tenuiculâ, arcuatâ, parum contortâ.*

THE OBLONG ANCILLARIA. Shell somewhat fusiformly oblong, purplish-fawn, banded at the sutures with a red-flamed cream-coloured callosity, spire acuminated, columella rather slender, arched, but little twisted.

SOWERBY, Species Conch. p. 7. f. 38, 39.

Hab. Australia.

The sutural callosity of this pretty species is of an opake cream-colour, striped longitudinally throughout with red-brown flames.

Species 25. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA LINEATA. *Anc. testâ acuminato-ovatâ, eburneâ, nitente, aurantio-fusco exiliter lineatâ, callositate suturali opaco-albâ, aurantio-fusco subobscurè flammatâ, spirâ elevatâ, columellâ arcuato-contortâ.*

THE LINEATED ANCILLARIA. Shell acuminately ovate, ivory-white, shining, delicately lineated with orange-brown, sutural callosity opake-white, rather obscurely flamed with orange-brown, spire raised, columella arcuately twisted.

KIENER, Icon. coq. viv. p. 16. pl. 3. f. 2.

Hab. Australia.

Of quite a different form from the preceding species, with the columella more arcuately twisted.

Species 26. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA SCAPHELLA. *Anc. testâ ovatâ, naviformi, tenui, inflatâ, albidâ, fuscescente sparsim tinctâ, spirâ minimâ, partim immersâ, columellâ subrectâ; aperturâ patulâ.*

THE LITTLE BOAT ANCILLARIA. Shell ovate, boat-shaped, thin, inflated, whitish, sparingly tinged with brown, spire very small, partially immersed, columella nearly straight; aperture wide open.

SOWERBY, Thes. Conch. Anc. p. 58. pl. 212. pl. 37, 38.

Hab. ——?

A light boat-shaped shell, with a very small, partially immersed spire.

Species 27. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Taylor.)

ANCILLARIA AMPLA. *Anc. testâ cylindraceo-oblongâ, subangustâ, albâ, rufo circa spiram interdum strigatâ, spirâ parvâ, suturis obliquè constrictis, anfractibus subinflatis, columellâ parum contortâ; aperturâ hiatulâ.*

THE AMPLE ANCILLARIA. Shell cylindrically oblong, rather narrow, white, sometimes streaked with red about the spire, spire small, sutures obliquely constricted, whorls rather inflated, columella but little twisted; aperture open.

Voluta ampla, Gmelin, Syst. Nat. p. 3467.
Bulla ampla, Wood.
Ancillaria candida, Lamarck.
Ancillaria ampla, Sowerby.
Ancillaria cylindrica, Sowerby.

Hab. Red Sea.

The spire of this species is not unfrequently streaked, or rather smeared, in an unusual manner with blood-red.

Species 28. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA OBESA. *Anc. testâ ovatâ, subobesâ, sordidè albidâ, purpurascente-rufo fasciatâ et flammatâ, spirâ conicâ, anfractibus supernè tumidiusculis, infernè bisulcatis, columellâ conspicuè arcuatâ.*

THE STOUT ANCILLARIA. Shell ovate, rather stout, dull white, banded and flamed with purplish-red, spire conical, whorls rather swollen round the upper part, double-grooved at the lower, columella conspicuously arched.

SOWERBY, Thes. Conch. Anc. p. 65. pl. 213. f. 44, 45.

Hab. New Zealand.

Peculiar in form, and of a dull livid purplish-red.

29.

30a.

30b.

31a.

32a.

32b.

31b.

33a.

33b.

34.

Sowerby, del. et lith.

Vincent Brooks, Imp.

ANCILLARIA.

PLATE IX.

Species 29. (Mus. Cuming.)

ANCILLARIA STRIOLATA. *Anc. testâ ovatâ, albidâ, spadiceo tinctâ, spirâ parvâ, conicâ, anfractibus cylindraceo-convexis, nitentibus, infernè bisulcatis, columellâ constricto-contortâ.*

THE FINELY-STRIATED ANCILLARIA. Shell ovate, whitish, fawn-tinted, spire small, conical, whorls cylindrically convex, shining, double-grooved at the lower part, columella constrictedly twisted.

SOWERBY, Thes. Conch. Anc. p. 60. pl. 212. f. 24, 25.

Hab. ——?

The enamel of this species has frequently a streaky appearance, scarcely amounting to the character of striæ.

Species 30. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA TRONSONI. *Anc. testâ ovatâ, subnaviculiformi, albidâ, nitente, spirâ minutâ, anfractibus subinflatis, columellâ parum contortâ.*

TRONSON'S ANCILLARIA. Shell ovate, somewhat boat-shaped, whitish, shining, spire very small, whorls a little inflated, columella but little twisted.

SOWERBY, Thes. Conch. Anc. p. 58. pl. 212. f. 20, 21.

Hab. Philippine Islands; Cuming.

Characterized by a slightly inflated, boat-like form, with a very small spire.

Species 31. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA CONTUSA. *Anc. testâ ovatâ, obesâ, crassissimâ, spadiceâ, castaneo-brunneo strigatâ et maculatâ, spirâ obtusâ, rudè callosâ, anfractibus modicè convexis, ad basin castaneo-brunneis, columellâ excavato-arcuatâ, abbreviato-truncatâ.*

THE BRUISED ANCILLARIA. Shell ovate, stout, very thick, fawn-colour, streaked and blotched with chestnut-brown, spire obtuse, rudely callous, whorls moderately convex, chestnut-brown at the base, columella excavately arched, shortly truncated.

Hab. ——?

This very striking shell approaches *A. obtusa* in general character, but it will be found on comparison to differ throughout, especially in the arched excavation of the columella.

Species 32. (Fig, *a*, *b*, Mus. Taylor.)

ANCILLARIA MARMORATA. *Anc. testâ ovatâ, inflatâ, albidâ, fulvo-carneo pallidè strigatâ et marmoratâ, spirâ conicâ, anfractibus declivi-convexis, columellâ subrectâ, fulvo-brunneâ.*

THE MOTTLED ANCILLARIA. Shell ovate, inflated, whitish, faintly streaked and mottled with fulvous flesh-colour, spire conical, whorls slopingly convex, columella nearly straight, fulvous-brown.

Hab. ——?

Characterized by a peculiar mottling of light, fulvous flesh-colour and opake-white, while the columella is conspicuously stained with fulvous-brown.

Species 33. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA SARDA. *Anc. testâ obeso-ovatâ, rufescente-luteâ, nitente, ad spiram obscurè albifasciatâ, spirâ conicâ, anfractibus tumido-convexis, columellâ constricto-contortâ, eburneâ.*

THE CORNELIAN ANCILLARIA. Shell stoutly ovate, reddish-yellow, shining, obscurely white-banded at the spire, spire conical, whorls tumidly convex, columella constrictedly twisted, ivory-white.

Hab. ——?

A shining yellow-enamelled shell, with a constrictedly twisted, ivory-white columella.

Species 34. (Mus. Cuming.)

ANCILLARIA CRASSA. *Anc. testâ obeso-ovatâ, crassâ, albidâ, spirâ subamplâ, conicâ, anfractibus tumido-convexis, infernè calloso-fasciatis et sulcatis, columellâ constricto-contortâ.*

THE THICK ANCILLARIA. Shell stoutly ovate, thick, whitish, spire rather large, conical, whorls tumidly convex, callously banded and grooved round the lower part, columella constrictedly twisted.

SOWERBY, Thes. Conch. Anc. p. 60. f. 90, 91.

Hab. Red Sea.

A swollen, callous shell, with a rather prominent spire.

35.

36 a.

36 b.

37 a.

38 a.

38 b.

37 b.

39 a.

39 b.

40.

ANCILLARIA.

PLATE X.

Species 35. (Mus. Cuming.)

ANCILLARIA LINEOLATA. *Anc. testâ ovatâ, tenuiculâ, pallidè aurantio-carneâ, ad spiram albifasciatâ, deinde longitudinaliter lineolatâ, anfractibus subinflatis, columellâ constricto-contortâ.*

THE FINELY-LINEATED ANCILLARIA. Shell ovate, rather thin, pale-orange flesh-colour, banded at the spire with white, then longitudinally, finely lineated, whorls rather inflated, columella constrictedly twisted.

ADAMS, Sow. Thes. Conch. Anc. p. 60. pl. 212. f. 22, 23.
Hab. Red Sea.

A delicately-tinted, shining species, of rather inflated growth, pencilled with very fine, opake white lines.

Species 36. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA MONILIFERA. *Anc. testâ acuminato-fusiformi, nitente albâ, aurantio-fusco exilissimè reticulatâ, suturis et basi maculis aurantio-fuscis nitidè tæniatis, spirâ elatâ; aperturâ parvâ, columellâ callosocontortâ.*

THE NECKLACE ANCILLARIA. Shell acuminately fusiform, shining white, very delicately reticulated with orange-brown, sutures and base neatly filleted with orange-brown spots, spire raised; aperture small, columella callously twisted.

Hab. Swan River.

An acuminated shell of shining, pearly whiteness, minutely delicately reticulated with orange-brown, the sutures and base being conspicuously encircled with a neat, regularly-formed necklace of spots of the same colour.

Species 37. (Fig. *a*, *b*, Mus. Taylor.)

ANCILLARIA BULLIOIDES. *Anc. testâ acuminatâ, versus basin inflatâ, pallidè spadiceâ, callositate latâ, opaco-albâ; aperturâ subabbreviatâ, ad basin truncatâ, columellâ excavato-arcuatâ, parum contortâ.*

THE BULLIA-LIKE ANCILLARIA. Shell acuminated, inflated towards the base, delicate fawn-colour, callosity broad, opake white; aperture rather short, truncated at the base, columella excavately arched, but little twisted.

Hab. —— ?

A delicately-tinted species, partaking in a remarkable degree of the generic character of *Bullia*.

Species 38. (Fig. *a*, *b*, Mus. Taylor.)

ANCILLARIA SINENSIS. *Anc. testâ angustè acuminatâ, pellucido-albâ, callositate opaco-albâ, spirâ acicular, constrictè liratâ et sulcatâ, columellâ arcuato-contortâ.*

THE CHINESE ANCILLARIA. Shell narrowly acuminated, transparent-white, callosity opake-white, spire acicular, constrictedly ridged and grooved, columella arcuately twisted.

SOWERBY, Thes. Conch. Anc. p. 65. pl. 213. f. 50, 51.
Hab. China.

This species has very much the appearance of a small *Mitra*, especially about the spire, which is constrictedly ridged and grooved throughout.

Species 39. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA DIMIDIATA. *Anc. testâ cylindraceo-oblongâ, tenuiculâ, pellucido-albâ, callositate opaco-albâ, latissimâ, spirâ parvâ, conicâ; aperturâ angustâ, columellâ constricto-contortâ.*

THE DIVIDED ANCILLARIA. Shell cylindrically oblong, rather thin, transparent-white, callosity opake-white, very broad, spire small, conical; aperture narrow, columella constrictedly twisted.

SOWERBY, Thes. Conch. Anc. pl. 62. pl. 213. f. 55, 56.
Hab. —— ?

Of a peculiar, narrowly oblong form, with an unusual breadth of callous enamel. This species represents quite a distinct type of the genus.

Species 40. (Mus. Cuming.)

ANCILLARIA OVALIS. *Anc. testâ ovatâ, crassâ, nitente albâ, spirâ conicâ, anfractibus tumido-convexis; aperturâ parviusculâ, columellâ constricto-contortâ.*

THE OVAL ANCILLARIA. Shell ovate, thick, shining white, spire conical, whorls tumidly convex; aperture rather small, columella constrictedly twisted.

SOWERBY, Thes. Conch. Anc. p. 60. pl. 214. f. 82, 83.
Hab. Red Sea.

A solid, shining white species of simple character.

41.

42.

43.

44a.

45a.

45b.

44b.

46.

47.

48.

Sowerby,del et lith.

Vincent Brooks Imp.

ANCILLARIA.

PLATE XI.

Species 41. (Mus. Cuming.)

ANCILLARIA NOVÆ-ZELANDIÆ. *Anc. testâ subangustè acuminatâ, nitente albâ, ad suturas opaco-callosâ; aperturâ angustâ, columellâ parum contortâ.*

THE NEW-ZEALAND ANCILLARIA. Shell rather narrowly acuminated, shining white, opakely callous at the sutures; aperture narrow, columella but little twisted.

SOWERBY, Thes. Conch. Anc. p. 65. pl. 213. f. 48, 49.

Hab. —— ?

This little shell, like *A. Sinensis*, has very much the appearance of a small *Mitra*, but the spire is not constrictedly ridged, as in that species.

Species 42. (Mus. Cuming.)

ANCILLARIA EBURNEA. *Anc. testâ ovatâ, lutescente-albâ, nitente, spirâ acutè conicâ, anfractibus supernè declivitumidis, columellâ constricto-contortâ.*

THE IVORY ANCILLARIA. Shell ovate, yellowish-white, shining, spire sharply conical, whorls slopingly tumid round the upper part, columella constrictedly twisted.

DESHAYES, Sowerby, Thes. Conch. Anc. p. 61. pl. 214. f. 84, 85.

Hab. —— ?

The whorls of this little glossy species are peculiarly swollen round the upper part.

Species 43. (Mus. Cuming.)

ANCILLARIA ORYZA. *Anc. testâ subangustè ovatâ, pellucido-albâ, fuscescente pallidissimè bifasciatâ, spirâ subexsertâ, anfractibus infernè subinflatis, columellâ constricto-contortâ.*

THE RICE ANCILLARIA. Shell rather narrowly ovate, transparent white, very faintly two-banded with brown, spire rather exserted, whorls somewhat inflated towards the lower part, columella constrictedly twisted.

Hab. —— ?

A narrowly convoluted shell, rather inflated towards the base.

Species 44. (Fig. *a*, *b*, Mus. Taylor.)

ANCILLARIA FASCIATA. *Anc. testâ ovatâ, subinflatâ, albidâ, rufescente-fusco infernè et ad suturas nitidè fasciatâ, spirâ parvâ, conicâ, columellâ excavato-arcuatâ, deinde contortâ.*

THE BANDED ANCILLARIA. Shell ovate, rather inflated, whitish, neatly banded round the lower part and at the sutures with reddish-brown, spire small, conical, columella excavately arched, then twisted.

Hab. —— ?

A very distinct form, encircled round the lower part and at the sutures with a characteristic coloured band.

Species 45. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA ANGUSTATA. *Anc. testâ angustè cylindraceâ, pellucido-spadiceâ, callositate supra et infra nitente aurantio-fuscâ, albo marginatâ, spirâ crassè obtusè callosâ, columellâ excavato-arcuatâ, vix contortâ.*

THE NARROWED ANCILLARIA. Shell narrowly cylindrical, transparent fawn-colour, callosity above and below shining orange-brown, edged with white, spire thickly obtusely callous, columella excavately arched, scarcely twisted.

SOWERBY, Thes. Conch. Anc. p. 63. pl. 211. f. 13.

Hab. China.

Distinguished by its narrow cylindrical form, and curiously obtuse, callous spire.

Figure 46. (Mus. Cuming.)

This little shell, the type of Mr. Sowerby's *A. cylindrica*, proves on examination to be a small *A. ampla*, the variety with red-stained spire.

Species 47. (Mus. Cuming.)

ANCILLARIA EXIGUA. *Anc. testâ cylindraceo-ovatâ, lutescente-albâ, valde callosâ, nitente, spirâ conicâ; aperturâ parvâ, ad basin truncatâ, ad anfractum calloso liratâ, columellâ brevi, subrectâ.*

THE LITTLE ANCILLARIA. Shell, cylindrically ovate, yellowish-white, very callous, shining, spire conical, aperture small, truncated at the base, callously ridged on the body-whorl, columella short, nearly straight.

SOWERBY, Thes. Conch. Anc. p. 61. pl. 214. f. 80, 81.

Hab. ——?

A very callous little shell, having a ridge upon the body-whorl within the aperture.

Species 51. (Fig. *a*, *b*, Mus. Cuming.)

ANCILLARIA TRICOLOR. *Anc. testâ ovatâ, nitente-spadiceâ, callositate supra et infra aurantio-fuscâ, albo marginatâ, spirâ subelevato-conicâ, anfractibus ad basin bisulcatis, columella arcuato-contortâ.*

THE THREE-COLOURED ANCILLARIA. Shell ovate, shining fawn-colour, callosity above and below orange-brown, edged with white, spire rather elevately conical, whorls double-grooved at the base, columella arcuately twisted.

GRAY, Sowerby, Thes. Conch. Anc. p. 63. pl. 211. f. 9, 10.

Hab. ——?

The callous spire of this species is very prettily banded, and the band is also conspicuous at the base.

49.

50 a.

50 b.

51 a.

50 c.

50 d.

51 b.

Sowerby, del. et. lith.

Vincent Brooks, Imp.

ANCILLARIA.

PLATE XII.

Species 49. (Mus. Cuming.)

ANCILLARIA BALTEATA. *Anc. testâ subfusiformi-oblongâ, nitente luteâ, crocato-tinctâ, spirâ conicâ, anfractibus supernè angulato-balteatis, umbilico subangusto.*

THE BELTED ANCILLARIA. Shell somewhat fusiformly oblong, shining yellow, tinged with saffron, spire conical, whorls angularly belted round the upper part, umbilicus rather narrow.

SWAINSON, Sowb. Spec. Conch. f. 63, 64.
Ancillaria nivea, Swainson.

Hab. ——?

There is much reason to believe that this is only a form of *A. glabrata*, in which the upper part of the whorls is thickened into an angularly projecting belt. It is probably a native of the Gulf of Mexico.

Species 50. (Fig. *a*, *b*, *c*, *d*, Mus. Cuming.)

ANCILLARIA LIENARDI. *Anc. testâ subgloboso-turbinatâ, vividè rufo-aurantiâ, spirâ breviusculâ, anfractibus supernè rotundato-convexis, umbilico subangusto, profundo.*

LIENARD'S ANCILLARIA. Shell somewhat globosely turbinated, bright reddish-orange, spire rather short, whorls rotundately convex round the upper part, umbilicus rather narrow, deep.

BERNARDI, Journ. Conch. vol. vii. p. 302. pl. 10. f. 4.

Hab. Pernambuco, Brazil.

This fine Brazilian species is well distinguished by its subglobose form and peculiar reddish-orange colouring.

Species 51. (Fig. *a*, *b*, Mus Cuming.)

ANCILLARIA GLABRATA. *Anc. testâ fusiformi-oblongâ, aurantio-croceâ, spirâ subelatâ, anfractibus ad suturas constrictis, deinde modicè convexis, umbilico subamplo, profundo.*

THE POLISHED ANCILLARIA. Shell fusiformly oblong, orange-saffron, spire rather elevated, whorls constricted at the sutures, then moderately convex, umbilicus rather large, deep.

Buccinum glabratum, Linnæus, Syst. Nat. p. 1203.
Eburnea glabrata, Lamarck.
Ancillaria glabrata, Sowerby.

Hab. Gulf of Mexico.

This well-known species is distinguished by its more fusiform growth, and constricted elevation of the spire.

ANCILLARIA.

	Plate.	Species.
acuminata, *Sowerby*	VII.	21
albifasciata, *Swainson*	VII.	20
albisulcata, *Sowerby*	VII.	22
ampla (*Voluta*), Gmelin	VIII.	27
angustata, *Sowerby*	XI.	45
aperta, *Sowerby*	VI.	16
australis, *Sowerby*	III.	7
balteata, *Swainson*	XII.	49
brunnea, Schumacher	VII.	19
Bullioides, *Reeve*	X.	37
candida, Lamarck	VIII.	27
castanea, *Sowerby*	VI.	17
cingulata, *Sowerby*	II.	4
cinnamomea, *Lamarck*	VII.	19
contusa, *Reeve*	IX.	31
crassa, *Sowerby*	IX.	34
cylindrica, Sowerby	VIII.	27
depressa, Sowerby	III.	7
Deshayesii, *Adams*	VII.	23
dimidiata, *Sowerby*	X.	39
eburnea, *Deshayes*	XI.	42
effusa, Swainson	VII.	19
elongata, Gray	V.	13
exigua, *Sowerby*	XI.	47
fasciata, *Reeve*	XI.	44
fulva, *Swainson*	VI.	18
glabrata (*Buccinum*), Linnæus	XII.	51
Lienardi, *Bernardi*	XII.	50
lineata, *Kiener*	VIII.	25
lineolata, *Adams*	X.	35
mamillata, *Hinds*	II.	3
marginata, *Lamarck*	III.	8
marmorata, *Reeve*	IX.	32
Mauritiana, Sowerby	V.	14
monilifera, *Reeve*	X.	36
Montrouzieri, *Sowerby*	IV.	9
mucronata, *Sowerby*	IV.	10
nivea, Swainson	XII.	49
Novæ-Zelandiæ, *Sowerby*	XI.	41
obesa, *Sowerby*	VIII.	28
oblonga, *Sowerby*	VIII.	24
obtusa, *Swainson*	III.	6
oryza, *Reeve*	XI.	43
ovalis, *Sowerby*	X.	40
pyramidalis, *Reeve*	IV.	11
rubiginosa, *Swainson*	II.	5
sarda, *Reeve*	IX.	33
scaphella, *Sowerby*	VIII.	26
similis, *Sowerby*	V.	12
Sinensis, *Sowerby*	X.	38
striolata, *Sowerby*	IX.	29
Tankervillii, *Swainson*	I.	2
torosa, *Meuschen*	V.	14
tricolor, Gray	XI.	48
Tronsoni, *Sowerby*	IX.	30
variegata, Sowerby	VI.	18
ventricosa, *Lamarck*	VI.	15
Vernedei, *Sowerby*	I.	1
volutella, Deshayes	V.	14

MONOGRAPH

OF THE GENUS

O V U L U M.

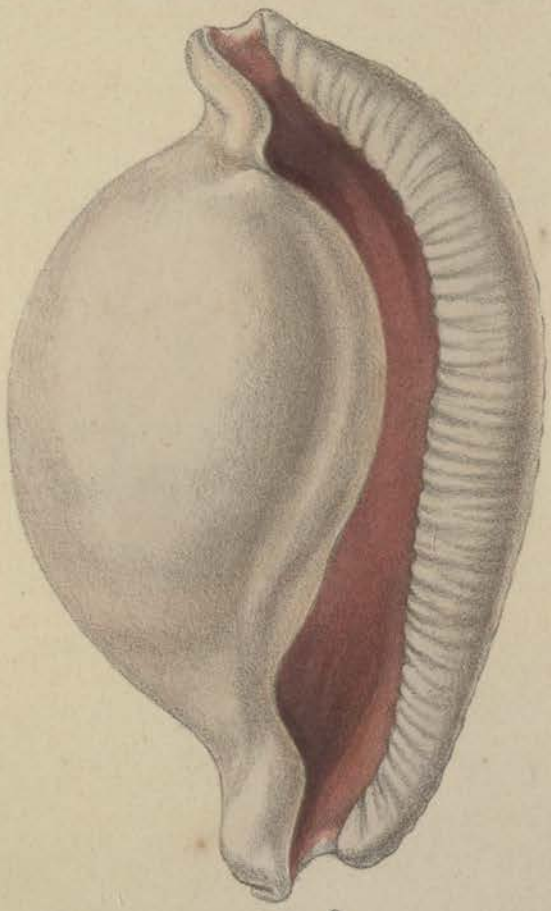
"Yet, they say, we are almost as like as eggs."

Shakspeare.

1.a.

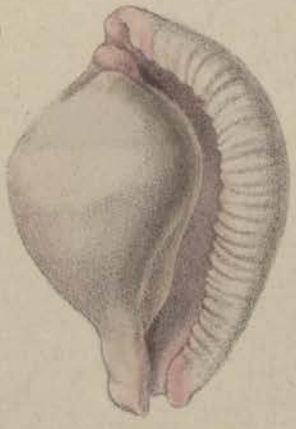
2.a.

2.b.



3.

4.a.



4.b.

1.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

OVULUM.

PLATE I.

Genus OVULUM, Bruguière.

Testa ovata vel lanceolata, spirâ plus minus immersâ, sæpissime occultâ, extremitatibus productis, interdum elongato-canaliculatis, rostratis, dorso plerumque polito, sæpe transversim inciso-striato, columellâ interdum uniplicatâ, nunc supernè nunc infernè, aperturâ subangustâ, infernè sinuatâ.

Shell ovate or lanceolate, spire more or less immersed, mostly concealed, extremities produced, sometimes elongately channelled, beaked, back generally polished, often transversely incisely striated, columella sometimes one-plaited, now at the upper part, now on the lower, aperture rather narrow, sinuated at the lower part.

Linnæus is not to be complimented on his sagacity in having referred the typical species of this group to the genus *Bulla*. The resemblance of the shell of *Ovulum* to that of *Cypræa* is obvious enough, and there is a similar affinity between the animals of the two genera. The *Ovulum* is in fact a Cowry, with the extremities more or less produced, in some instances to the extent of being tubularly channelled. But the *Ovula* are characterized by other not less striking peculiarities. A large proportion of the shells are of a uniform porcelain-white substance, and they are not diversified with marking like the Cowries. Where colour exists it is a uniform tint of rose, orange-red, or livid purple. Very interesting figures of *O. verrucosum* and *O. volva* were published in the 'Mollusca of the Voyage of the Samarang,' from drawings made by Mr. Arthur Adams, from living specimens captured in the Sea of Mindoro. Touching the habits of the first, the author remarks, "It is a very slow-moving and sluggish mollusk, with all the peculiarities of the Cowries, and exhibits a singularly beautiful and striking appearance under the calm, shallow water, as it glides tranquilly along the bright, sandy bottom;" the mantle and foot being prettily spotted with black upon a white ground. The chief peculiarity in the animal of *O. volva* is that the mantle is margined with a row of nipples.

The *Ovula* belong almost exclusively to the Eastern Hemisphere, and the species are very widely distributed. Out of fifteen species lately dredged by Mr. Arthur Adams in Japan, at a depth of from forty to fifty fathoms, only one proved to be new. All the rest had been described from specimens previously obtained from the Philippine Islands, Singapore, Borneo, China Seas, and even New Caledonia; and there are about fifteen more from these localities that were not taken in Japan. There is a characteristic European species, *O. patula*, inhabiting our shores, and there is a second species in the Mediterranean, *O. carneum*, not as yet found in British waters. Two very striking species, *O. lacteum* and *longirostratum*, are recorded from the Adriatic, one from Senegal, one from Bombay, four from the Pacific, five from New Caledonia, and three from Australia. The *Ovula* of the Western Hemisphere are restricted to the striking *O. gibbosum*, which is a native of the shores of Brazil, *O. uniplicatum*, which is said to have been collected both at Rio Janeiro and South Carolina, and a few species of a small, livid-purple type, inhabiting the shores the of West Indies, Honduras, California, and Panama.

Species 1. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM LACTEUM. *Ov. testâ ovatâ, solidiusculâ, albâ, dorso obscurè costellato, canalibus brevissimis, columellâ ad basin uniplicatâ, labro subconspicuè denticulato, aperturâ angustâ.*

THE MILKY OVULUM. Shell ovate, rather solid, white, back obscurely finely ribbed, canals very short, columella one-plaited at the base, lip rather conspicuously denticulated, aperture narrow.

LAMARCK, Anim. sans vert. vol. x. p. 470.

Calpurnus lacteus, Adams.

Hab. Philippine Islands; Cuming. Kino-O-Sima, Japan; Adams.

Mr. Sowerby gives Pacific Ocean as the habitat of this species. Lamarck gives the island of Timor; and Mr. Cuming collected it at three or four of the Philippine Islands.

Species 2. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM VERRUCOSUM. *Ov testâ ovatâ, Cyprææformi, albâ, solidissimâ, dorso gibboso-angulato, ad extremitates profundè verrucosâ, rosaceâ, ad latera callosâ, columellâ tumidâ, ad basin excavatâ, labro validè denticulato.*

THE WARTED OVULUM. Shell ovate, Cowry-shaped, white, very thick, back gibbously angulated, deeply warted and pinkish at the extremities, callous at the sides, columella swollen, excavated at the base, lip strongly denticulated.

Bulla verrucosa, Linnæus, Syst. Nat. p. 1182.
Ovula verrucosa, Lamarck.
Calpurnus verrucosus, De Montford.

Hab. Philippine Islands; Cuming.

The characteristic feature of the warts in this species is similar to that in *Cypræa bicallosa*, scarcely sufficient to make it the type of a distinct genus.

Species 3. (Mus. Cuming.)

OVULUM OVUM. *Ov. testâ ovatâ, albâ, dorso rotundato-ventricoso, extremitatibus subcontorto-productis, columellâ ad basin constrictâ, labro confertim serrato-corrugato, intus sanguineo-fuscâ.*

THE EGG OVULUM. Shell ovate, white, back rotundately ventricose, extremities somewhat twistedly produced, columella constricted at the base, lip closely serrately corrugated, blood-brown within.

Bulla ovum, Linnæus, Syst. Nat. p. 1181.
Ovula oviformis, Lamarck.
Ovula alba, Schumacher.

Hab. Eastern Seas; Pacific.

This well-known species is found abundantly among the islands of the Eastern Archipelago. It is also an inhabitant of the Society Islands.

Species 4. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM TORTILE. *Ov. testâ subpyriformi-ovatâ, albâ, solidissimâ, dorso gibboso, obtusè angulato, extremitatibus obtusè contortis, labro tumido-calloso, irregulariter serrato-corrugato, columellâ versus basin constrictâ, intus rosaceo pallidè tinctâ.*

THE WINDING OVULUM. Shell somewhat pyriformly ovate, white, very solid, back gibbous, obtusely angled, extremities obtusely twisted, lip tumidly callous, irregularly serrately wrinkled, columella constricted towards the base, interior faintly tinged with pink.

Cypræa tortilis, Martyn, Univ. Conch. pl. 60.
Bulla imperialis, Dillwyn.
Ovula angulosa, Lamarck.
Ovula columba, Schubert and Wagner.

Hab. Friendly Islands; Martyn.

This species may always be distinguished from small specimens of *O. ovum*, by the delicate pink colouring of its interior.

5.a.

6.a.

6.b.

7.a.

8.a.

8.b.

7.b.

9.a.

9.b.

5.b.

Sowerby, del.et lith.

Vincent Brooks, Imp.

OVULUM.

PLATE II.

Species 5. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM BREVE. *Ov. testâ ovatâ, subventricosâ, flavescente-albâ, dorso purpurascente, obscurè costellato, extremitatibus rotundatè emarginatis, labro modicè serrato, columellâ supernè calloso-liratâ, infernè excavatâ uniplicatâ, aperturâ patulâ.*

THE SHORT OVULUM. Shell ovate, somewhat ventricose, yellowish-white, back purple, obscurely finely ribbed, extremities rotundately emarginated, lip moderately serrated, columella callously ridged at the upper part, excavated and one-plaited at the lower, aperture wide open.

SOWERBY, Spes. Conch. pt. i. p. 5. f. 26, 27.
Amphiperas brevis, Adams.
Hab. Port Curtis, Australia.

A species intermediate in character between *O. lacteum* and *emarginatum*.

Species 6. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM PUDICUM. *Ov. testâ ovatâ, rosaceo-albâ, dorso lævigato, extremitatibus rotundatis, vix emarginatis, labro crassè varicoso, columellâ supernè et infernè lirato-callosâ, uniplicatâ.*

THE CHASTE OVULUM. Shell ovate, pinkish-white, back smooth, extremities rounded, scarcely emarginated, lip thickly varicose, columella callously ridged above and below, one-plaited.

Amphiperas pudica, Adams, Pro. Zool. Soc. 1854, p. 131.
Hab. New Caledonia.

An extremely delicate species, in which the columella is callously ridged below as well as above, the ridge being continuous with the outer lip.

Species 7. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM ADRIATICUM. *Ov. testâ elongato-ovatâ, subpyriformi, tenui, pellucidâ, albâ, dorso transversim obscurè costellato, longitudinaliter minutè striato, extremitatibus subcanaliculatis, labro opaco, tenuiserrato, columellâ vix plicatâ.*

THE ADRIATIC OVULUM. Shell elongately ovate, somewhat pear-shaped, thin, transparent, white, back transversely obscurely ribbed, longitudinally minutely striated, extremities somewhat channelled, lip opake, thinly serrated, columella scarcely plaited.

SOWERBY, Spes. Conch. pt. i. p. 4. f. 23, 24.
Hab. Adriatic Sea.

This very delicate transparent shell is distinguished by its elongately pyriform character.

Species 8. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM MARGINATUM. *Ov. testâ subpyriformi-ovatâ, pellucido-albâ, dorso transversim obscurè costellato, longitudinaliter minutè striato, labro opaco, crasso, irregulariter dentato-serrato, columellâ supernè calloso-liratâ, inferne excavatâ et obtusè plicatâ.*

THE MARGINED OVULUM. Shell somewhat pyriformly ovate, transparent white, back transversely obscurely finely ribbed, longitudinally minutely striated, lip opake, thick, irregularly dentately serrated, columella callously ridged at the upper part, excavated and obtusely plicated at the lower.

SOWERBY, Spes. Conch. pt. i. p. 5. f. 15, 16.
Hab. —— ?

The excavation at the base of the columella gives more than usual width to the aperture of this species.

Species 9. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM PYRIFORME. *Ov. testâ pyriformi-ovatâ, solidiusculâ, rosaceo-albâ, dorso lævigato, extremitatibus canaliculato-rostratis, labro crasso, columellâ supernè calloso-liratâ, infernè subobscurè plicatâ.*

THE PEAR-SHAPED OVULUM. Shell pyriformly ovate, rather solid, pinkish-white, back smooth, extremities canaliculately beaked, lip thick, columella callously ridged at the upper part, rather obscurely plicated at the lower.

SOWERBY, Spes. Conch. pt. i. p. 5. f. 21, 22, 25.
Amphiperas pyriformis, Adams.
Hab. New South Wales; Sowerby. Satanomosaki, Japan (at the depth of fifty-five fathoms); Adams.

The distinguishing peculiarity of this species consists in its extremities being canaliculately beaked. The shell is therefore more than usually constricted at the base, and more pear-shaped.

10.a.

11.a.

11.b.

12.a.

13.a.

13.b.

12.b.

14.a.

14.b.

10.b.

Sowerby, del et lith.

Vincent Brooks, Imp.

OVULUM.

PLATE III.

Species 10. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM MARGARITA. *Ov. testâ subventricoso-pyriformi, albâ, extremitatibus subrostratis, columellâ labroque tumidis, modicè sculptis.*

THE PEARL OVULUM. Shell somewhat ventricosely pyriform, white, extremities somewhat beaked, columella and lip swollen, moderately sculptured.

SOWERBY, Spes. Conch. pt. i. f. 19, 20.

Hab. Philippine Islands; Cuming.

Chiefly distinguished by a ventricose pear-shape, not much unlike *Cypræa margarita* in general aspect.

Species 11. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM BIMACULATUM. *Ov. testâ ovatâ, livido-albâ, extremitatibus constrictis et rostratis, dorso transversim striato-inciso, labro crassè varicoso, columellâ supernè calloso-lirato, infernè latè excavatâ, vix plicatâ, extremitatibus intus rufo tinctis.*

THE TWO-SPOTTED OVULUM. Shell ovate, livid-white, extremities constricted and beaked, back transversely striately engraved, lip thickly varicose, columella callously ridged at the upper part, broadly excavated at the lower, scarcely plaited, extremities stained with red in the interior.

Amphiperas bimaculata, Adams, Pro. Zool. Soc. 1854, p. 131.

Hab. New Caledonia.

An elegant, constrictedly beaked shell, characterized by the presence of a red-brown blotch within each of the extremities.

Species 12. (Fig. *a*, *b*, Mus. Taylor.)

OVULUM NUBECULATUM. *Ov. testâ pyriformi-ovatâ, subventricosâ, rosaceo-carneo fasciato-nubeculatâ, dorso obscurè costellato et striato, labro parum incrassato, columellâ supernè et infernè calloso-liratâ, tenuiplicatâ, aperturâ patulâ.*

THE CLOUDED OVULUM. Shell pyriformly ovate, somewhat ventricose, bandedly clouded with pinkish flesh-colour, back obscurely finely ribbed and striated, lip but little thickened, columella callously ridged above and below, thinly plaited, aperture wide open.

ADAMS and REEVE, Moll. Voy. Samarang, p. 23. pl. 6. f. 12 *a*, *b*, *c*.

Hab. Island of Basilan, Eastern Seas.

A delicately-coloured shell, of very symmetrical, ventricosely pyriform growth.

Species 13. (Fig. *a*, *b*, Mus. Taylor.)

OVULUM SEMISTRIATUM. *Ov. testâ subangustè ovatâ, albâ, ad extremitates rostratâ, dorso medio lævigato, supernè et infernè transversim striato-inciso, labro crassè varicoso, columellâ calloso-liratâ, infernè vix plicatâ.*

THE HALF-STRIATED OVULUM. Shell rather narrowly ovate, white, beaked at the extremities, back smooth in the middle, transversely striately engraved above and below, lip thickly varicose, columella callously ribbed at the upper part, scarcely plaited at the lower.

PEASE, Pro. Zool. Soc. 1862, p. 241.

Hab. Sandwich Islands; Pease.

There are several species of *Ovulum* in which the back is transversely striately engraved above and below, while the middle is smooth, but the character is rather prominent in this species.

Species 14. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM UMBILICATUM. *Ov. testâ globoso-pyriformi, tenui, ventricosâ, albâ, labro parum incrassato, columellâ supernè et infernè calloso-liratâ, tenuiplicatâ, aperturâ patulâ.*

THE UMBILICATED OVULUM. Shell globosely pyriform, thin, ventricose, white, lip but little thickened, columella callously ridged above and below, thinly plaited, aperture wide open.

SOWERBY, Pro. Zool. Soc. 1848, p. 135; Thes. Conch. pl. 101. f. 88, 89.

Amphiperas umbilicata, Adams.

Hab. Philippine Islands; Cuming. Gotto Islands, Japan (at the depth of seventy-one fathoms); Adams.

Remarkable for its short globosely-inflated pearl-like form.

15.a.

16.a.

16.b.

17.a.

18.a.

18.b.

17.b.

19.a.

19.b.

15.b.

OVULUM.

PLATE IV.

Species 15. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM TRITICEUM. *Ov. testâ suboblongo-ovatâ, purpurascente-carneâ, dorso medio gibbosiusculo, extremitatibus rostratis, subproductis, labro varicoso, flavescente, columellâ supernè calloso-liratâ, infernè subcontortâ, plicâ obsoletâ.*

THE WHEAT OVULUM. Shell rather oblong-ovate, purple flesh-colour, back rather gibbous in the middle, extremities beaked and rather produced, lip varicose, yellowish, columella callously ridged at the upper part, slightly twisted at the lower, plait obsolete.

LAMARCK, Anim. sans vert. vol. x. p. 470.

Bulla lepida, Dillwyn.

Hab. ——?

Lamarck gives "côtes d'Afrique" as the habitat of this species, but I have not been able to verify it.

Species 16. (Fig. *a*, *b*, Mus. Taylor.)

OVULUM FRUTICUM. *Ov. testâ subpyriformi-ovatâ, rosaceo-carneo latifasciatâ, lævigatâ, labro crasso, varicoso, extremitatibus rotundato-emarginatis, columellâ supernè et infernè calloso-liratâ, valde uniplicatâ.*

THE CORN OVULUM. Shell somewhat pyriformly ovate, broadly banded with pinkish flesh-colour, smooth, lip thick, varicose, extremities rotundately emarginated, columella callously ridged above and below, strongly one-plaited.

ADAMS, MS. in Mus. Taylor.

Hab. Malacca.

A delicately-coloured shell of rather solid growth, neatly symmetrical in form.

Species 17. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM CARNEUM. *Ov. testâ anguste ovatâ, solidiusculâ, rufescente-carneâ, dorso medio lævigato, supra et infra transversim inciso-striato, extremitatibus attenuato-canaliculatis, labro opaco-incrassato, columellâ supernè calloso-liratâ, infernè plano-excavatâ, plicâ ferè obsoletâ.*

THE FLESH-COLOURED OVULUM. Shell narrowly ovate, rather solid, reddish flesh-colour, back smooth in the middle, transversely groove-striated above and below, extremities attenuately channelled, lip opakely thickened, columella callously ribbed at the upper part, flatly excavated at the lower, plait almost obsolete.

Bulla carnea, Poiret, Voy. en Barbarie, vol. ii. p. 21.

Ovula carnea, Lamarck.

Calpurnus carneus, Adams.

Hab. Mediterranean. Kino-O-Sima, Japan; Adams.

The extremities of this very characteristic species are sometimes stained in the interior with bright reddish-orange.

Species 18. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM RHODIA. *Ov. testâ elongato-ovatâ, rufescente, extremitate superiori canaliculato-productâ, inferiori latè truncato-emarginatâ, columellâ supernè calloso-liratâ, infernè plano-excavatâ, plicâ fere obsoletâ.*

THE RUDDY OVULUM. Shell elongately ovate, reddish, upper extremity canaliculately produced, the lower broadly truncately emarginated, columella callously ridged at the upper part, slightly excavated at the lower, plait almost obsolete.

Amphiperas rhodia, Adams, Pro. Zool. Soc. 1854, p. 130. pl. 28. f. 8.

Hab. Japan; Adams.

A prettily-coloured species, closely allied to the Mediterranean *O. carneum*.

Species 19. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM PYRULINUM. *Ov. testâ ovato-pyriformi, ad extremitates constrictâ et rostratâ, livido-albâ, dorso medio gibbosiusculo, extremitatibus canaliculato-emarginatis, columellâ supernè calloso-liratâ, infernè attenuatâ, modicè plicatâ.*

THE LITTLE PEAR-LIKE OVULUM. Shell ovately pyriform, constricted and beaked at the extremities, livid-white, back rather gibbous in the middle, extremities canaliculately emarginated, columella callously ridged at the upper part, attenuated at the lower, moderately plicated.

Amphiperas pyrulina, Adams, Pro. Zool. Soc. 1854, p. 131.

Hab. New Caledonia.

An elegantly formed shell, of rather solid growth, beaked and canaliculately emarginated at the extremities.

20.a.

21.a.

21.b.

22.a.

23.a.

23.b.

22.b.

24.a.

24.b.

20.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

OVULUM.

PLATE V.

Species 20. (Fig. *a*, *b*, Mus. Taylor.)

OVULUM BULLA. *Ov. testâ ovatâ, rotundato-inflatâ, sordidè albâ, ad basin constrictâ, labro incrassato, copiosè denticulato, extremitatibus arcuato-productis, columellâ supernè calloso-liratâ, plicâ abbreviato-contortâ.*

THE BUBBLE OVULUM. Shell ovate, rotundately inflated, dull-white, constricted at the base, lip thickened, copiously denticulated, extremities arcuately produced, columella callously ridged at the upper part, plait shortly twisted.

ADAMS and REEVE, Moll. Voy. Samarang, p. 21. pl. 6. f. 5 *a*, *b*.

Amphiperas bulla, Adams.

Hab. China Seas; Belcher. Satanomosaki, Japan (at the depth of fifty-five fathoms); Adams.

Chiefly distinguished by its rotundately inflated growth and curved aperture.

Species 21. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM CONCINNUM. *Ov. testâ angulato-pyriformi, solidiusculâ, dorso conspicuè gibboso, ad basin constricto, labro incrassato, eximiè denticulato, columellâ supernè calloso-liratâ, plicâ ferè obsoletâ.*

THE NEAT OVULUM. Shell angularly pear-shaped, rather solid, back conspicuously gibbous, constricted at the base, lip thickened, faintly denticulated, columella callously ridged at the upper part, plait nearly obsolete.

ADAMS and REEVE, Moll. Voy. Samarang, p. 22. pl. 6. f. 8 *a*, *b*, *c*.

Calpurnus coccineus, Adams.

Hab. Isle of Capul, Philippines. Mino-Sima, Japan (at the depth of sixty-three fathoms); Adams.

A rather solid shell, very prominently angularly gibbous on the back.

Species 22. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM PUNCTATUM. *Ov. testâ pyriformi, solidiusculâ, albâ, aurantio-fusco subdistanter grandimaculatâ, dorso copiosè inciso-striato, extremitatibus subproductis, columellâ supernè calloso-liratâ, plicâ ferè obsoletâ.*

THE DOTTED OVULUM. Shell pear-shaped, rather solid, white, somewhat distantly large-spotted with orange-brown, back copiously incisely striated, extremities rather produced, columella callously ridged at the upper part, plait nearly obsolete.

DUCLOS, Guerin, Mag. de Zool. 1828.

Amphiperas punctata, Adams.

Hab. Philippine Islands; Cuming. China Seas; Belcher. Gotto Islands, Japan (at the depth of seventy-one fathoms); Adams.

This species is distinguished from all others by its characteristic orange-brown spots.

Species 23. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM ALABASTER. *Ov. testâ subpyriformi-ovatâ, pellucido-albâ, dorso transversim inciso-striato, extremitatibus subproductis, aperturâ curvatâ, columellâ supernè calloso-liratâ, infernè excavatâ, vix plicatâ.*

THE ALABASTER OVULUM. Shell somewhat pyriformly ovate, transparent white, back transversely incisely striated, extremities rather produced, aperture curved, columella callously ribbed at the upper part, excavated at the lower, scarcely plaited.

Hab. Senegal.

A colourless semitransparent species, approaching the preceding in general form.

Species 24. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM ADAMSII. *Ov. testâ ovatâ, inflatâ, albâ, dorso medio elevatiusculo, transversim inciso-striato, extremitatibus subobtusis, labro modicè incrassato, aperturâ curvatâ latiusculâ, columellâ vix plicatâ.*

ADAMS'S OVULUM. Shell ovate, inflated, white, back rather elevated in the middle, transversely incisely striated, extremities rather obtuse, lip moderately thickened, aperture curved, rather broad, columella scarcely plicated.

Amphiperas marginata, Adams (not of Sowerby), Pro. Zool. Soc. 1854, p. 130.

Hab. New Caledonia; Cuming.

A delicate rather inflated bubble-shaped shell, elaborately sculptured with engraved striæ.

25.a.

26.a.

26.b.

27.a.

28.a.

28.b.

27.b.

29.a.

29.b.

25.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

OVULUM.

PLATE VI.

Species 25. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM FRUMENTUM. *Ov. testâ angustè pyriformi, rosaceo-albâ, extremitatibus attenuatè productis, dorso undique transversim inciso-striato, aperturâ angustâ, columellâ haud plicatâ.*

THE RYE OVULUM. Shell narrowly pear-shaped, pinkish-white, extremities attenuately produced, back transversely incisely striated throughout, aperture narrow, columella not plaited.

SOWERBY, Spes. Conch. pt. i. p. 7. f. 37.

Hab. ——?

A very characteristic species, neatly sculptured throughout, with the extremities rather more than usual produced.

Species 26. (Fig. *a*, *b*, Mus. Taylor.)

OVULUM BULLATUM. *Ov. testâ oblongo-pyriformi, albidâ, aurantio-fuscescente pallidè tinctâ, dorso undique transversim inciso-striato, supernè gibboso, infernè attenuato, labro varicoso-reflexo, ad extremitates peculiariter subquadrato-producto, columellâ supernè callosâ, infernè excavatâ, vix plicatâ.*

THE BUBBLE-SHAPED OVULUM. Shell oblong-pyriform, whitish, faintly tinged with reddish-brown, back transversely incisely striated throughout, gibbous at the upper part, attenuated at the lower, lip varicosely reflected, peculiarly somewhat squarely produced at the extremities, columella callous at the upper part, excavated at the lower, scarcely plaited.

ADAMS and REEVE, Moll. Voy. Samarang, p. 23. pl. 6. f. 13 *a*, *b*.

Calpurnus bullatus, Adams.

Hab. Caramata Passage, near Singapore; Belcher. Gotto Islands, Japan (at the depth of seventy-one fathoms); Adams.

A very striking and well-defined species, in which the lip is peculiarly squared and produced at the extremities.

Species 27. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM DORSUOSUM. *Ov. testâ angustè pyriformi, albidâ, dorso supernè gibboso, infernè attenuato, extremitatibus modicè canaliculato-productis, columellâ haud plicatâ.*

THE BACKED OVULUM. Shell narrowly pear-shaped, white, back gibbous at the upper part, attenuated at the lower, extremities moderately canaliculately produced, columella not plaited.

HINDS, Moll. Voy. Sulphur, p. 47. pl. 16. f. 3, 4.

Calpurnus dorsuosus, Adams.

Hab. Straits of Malacca (in mud, at the depth of nine fathoms); Belcher. Gotto Islands, Japan (at the depth of forty-eight fathoms); Adams.

Of a somewhat slenderly angled form, with the extremities produced into a short channel.

Species 28. (Fig. *a*, *b*, Mus. Taylor.)

OVULUM STRIATULUM. *Ov. testâ angustè pyriformi, rosaceo-albâ, dorso undique transversim inciso-striato, infernè constricto-attenuato, labro varicoso, planato, extremitatibus subcanaliculato-productis, columellâ excavatâ, vix plicatâ.*

THE FINELY-STRIATED OVULUM. Shell narrowly pear-shaped, pinkish-white, back transversely incisely striated throughout, constrictedly attenuated at the lower, lip varicose, flattened, extremities somewhat canaliculately produced, columella excavated, scarcely plaited.

SOWERBY, Spes. Conch. pt. i. p. 7. p. 38.

Calpurnus striatulus, Adams.

Hab. Philippine Islands; Cuming. Loochoo Islands; Belcher. Tsusaki, Japan (at the depth of fifty-five fathoms); Adams.

Greatly resembling the preceding species in general form, but the back, instead of being smooth, is incisely striated throughout, while the extremities are not so obviously channelled.

Species 29. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM SCITULUM. *Ov. testâ subpyriformi-oblongâ, pellucido-albâ, dorso lævigato, labro varicoso, planato, ad extremitates quadrato, columellâ supernè callosâ, haud plicatâ.*

THE PRETTY OVULUM. Shell somewhat pyriformly-oblong, transparent white, back smooth, lip varicose, flattened, squared at the extremities, columella callous at the upper part, not plaited.

Amphiperas scitula, Adams, Pro. Zool. Soc. 1854, p. 131.

Radius scitulus, Adams (Pro. Linn. Soc. 1863).

Hab. New Caledonia. Tsu-Sima, Japan (at the depth of twenty-five fathoms); Adams.

The squaring of the lip towards the extremities imparts a more than usually excavated character to the aperture.

30.a.

31.a.

31.b.

32.a.

33.a.

33.b.

32.b.

34.a.

34.b.

30.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

OVULUM.

PLATE VII.

Species 30. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM PATULUM. *Ov. testâ ovatâ, utrinque subalatâ, tenui, pellucido-albâ, extremitatibus canaliculato-rostratis, labro tenui, aperturâ patulâ, columellâ utrinque contorto-productâ, haud plicatâ.*

THE OPEN OVULUM. Shell ovate, slightly winged at each end, thin, transparent white, extremities canaliculately beaked, lip thin, aperture wide open, columella slightly twistedly produced, not plaited.

Bulla patula, Pennant, Brit. Zool. 4th edit. vol. iv. p. 117. pl. 70. f. 85 *a*.

Volva patula, Fleming.

Ovulum patulum, Sowerby.

Hab. Mediterranean. Southern and western shores of England and Ireland.

A very distinct form of the genus, in which the lip seems scarcely to have arrived at maturity.

Species 31. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM OBTUSUM. *Ov. testâ elongato-ovatâ, flavescente-albâ, dorso modicè gibboso, extremitatibus calloso-attenuatis, aperturâ angustâ, columellâ haud plicatâ.*

THE OBTUSE OVULUM. Shell elongately ovate, yellowish-white, back moderately gibbous, extremities callously attenuated, aperture narrow, columella not plaited.

SOWERBY, Spes. Conch. pt. 1. p. 1. f. 34.

Radius obtusus, Adams.

Hab. China Sea; Belcher. Mino-Sima, Japan (at the depth of sixty-three fathoms); Adams.

Rather more narrowly compressed than its nearest allied species, *O. emarginatum*, with the characters more obscurely developed.

Species 32. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM GIBBOSUM. *Ov. testâ oblongâ, crassiusculâ, pallidè stramineâ, ad latera spadiceo tinctâ, dorso conspicuè gibboso-costato, extremitutibus obtusis, labro calloso-incrassato, columellâ haud plicatâ.*

THE GIBBOUS OVULUM. Shell oblong, rather thick, pale straw-colour, stained at the sides with light fawn, back conspicuously gibbously ribbed, extremities obtuse, lip callously thickened, columella not plaited.

Bulla gibbosa, Linnæus, Syst. Nat. p. 1183.

Ovula gibbosa, Lamarck.

Hab. Brazil; Lamarck. Panama; Cuming.

This well-known species is of a solid porcelain substance.

Species 33. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM INTERMEDIUM. *Ov. testâ elongato-ovatâ, solidiusculâ, rufescente-flavâ, dorso medio gibboso-lirato, extremitatibus canaliculato-attenuatis, labro incrassato, columellâ supernè contorto-callosâ, haud plicatâ.*

THE INTERMEDIATE OVULUM. Shell elongately ovate, rather solid, reddish-yellow, back moderately gibbously ridged, extremities canaliculately attenuated, lip thickened, columella twistedly callous at the upper part, not plaited.

SOWERBY, Spes. Conch. pt. i. p. 9. f. 32, 33.

Hab. Brazil.

This species, as its name indicates, is intermediate in character between *O. obtusum* and *O. birostre*.

Species 34. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM EMARGINATUM. *Ov. testâ oblongâ, crassiusculâ, flavescente-albâ, interdum aurantio et pupurascente tinctâ, dorso medio conspicuè gibboso-costato, extremitatibus abbreviato-emarginatis, callosis, labro calloso incrassato, columellâ supernè contorto-callosâ, haud plicatâ.*

THE EMARGINATED OVULUM. Shell oblong, rather thick, yellowish-white, sometimes tinged with orange and purple, back conspicuously gibbously ribbed, extremities shortly emarginated, callous, lip callously thickened, columella twistedly callous at the upper part, not plaited.

SOWERBY, Spes. Conch. pt. i. p. 7. f. 54, 55.

Hab. St. Elena, West Columbia; Cuming.

The peculiarity of this species, as distinguished from *O. gibbosum*, consists chiefly in the thickened callosities of the shell being everywhere so prominently developed.

35.a.

36.a.

36.b.

37.a.

38.a.

38.b.

37.b.

39.a.

39.b.

35.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

OVULUM.

PLATE VIII.

Species 35. (Fig. *a*, *b*, Mus. Taylor.)

OVULUM ACUMINATUM. *Ov. testâ sublanceolato-ovatâ, flavescente-albâ, extremitatibus subattenuato-productis, labro incrassato, columellâ gracili, supernè contorto-liratâ, haud plicatâ.*

THE ACUMINATED OVULUM. Shell somewhat lanceolately ovate, yellowish-white, extremities somewhat attenuately produced, lip thickened, columella slender, twistedly ridged at the upper part, not plaited.

ADAMS and REEVE, Moll. Voy. Samarang, p. 21. pl. 6. f. 1 *a*, *b*.

Radius acuminatus, Adams.

Hab. Isle of Bilaton, Eastern Seas; Belcher. Kino-O-Sima, Japan (at the depth of thirty-five fathoms); Adams.

This has somewhat the appearance of a minute slender form of *O. intermedium*, but it is quite a distinct species.

Species 36. (Fig. *a*, *b*, Mus. Taylor.)

OVULUM DENTATUM. *Ov. testâ lanceolato-pyriformi, flavescente-albâ, spadiceo obscurè inquinatâ, dorso undique transversim inciso-striato, extremitatibus canaliculato-productis, labro varicoso-incrassato, dentato-serrato, columellâ supernè dentato-callosâ, infernè minutè plicatâ.*

THE TOOTHED OVULUM. Shell lanceolately pear-shaped, yellowish-white, obscurely smeared with fawn-colour, back transversely incisely striated throughout, extremities canaliculately produced, lip varicosely thickened, dentately serrated, columella dentately callous at the upper part, minutely plicated at the lower.

ADAMS and REEVE, Moll. Voy. Samarang, p. 21. pl. 6. f. 4 *a*, *b*.

Calpurnus dentatus, Adams.

Hab. Caramata Passage, near Singapore; Belcher. Gotto Islands, Japan (at the depth of forty-eight fathoms); Adams.

A very interesting species, of which the characters above detailed are very neatly and prominently developed. The two habitats here quoted show a tolerably wide distribution.

Species 37. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM HORDACEUM. *Ov. testâ elongato-oblongâ, purpurascente-flavâ, vividè aurantio marginatâ, dorso supernè gibboso-angulato, transversim inciso-striato, labro planato, profusè dentato-serrato, pone fimbriato, extremitatibus conspicuè canaliculato-productis, columellâ supernè dentato-serratâ, haud plicatâ.*

THE BARLEY OVULUM. Shell elongately oblong, purplish-yellow, edged with bright orange, back gibbously angled at the upper part, transversely incisely striated, lip flattened, profusely dentately serrated, fimbriated behind, extremities conspicuously canaliculately produced, columella dentately serrated at the upper part, not plaited.

LAMARCK, Anim. sans vert. vol. x. p. 471.

Hab. —— ?

Another species typically allied to the preceding, in which the details both of colour and sculpture are conspicuous.

Species 38. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM TRAILLII. *Ov. testâ lanceolato-ovatâ, albidâ, rosaceo-fuscescente tinctâ, dorso medio gibboso, lævigato, extremitatibus subcanaliculatis, aperturâ angustâ, columellâ calloso-lævigatâ.*

TRAILL'S OVULUM. Shell lanceolately ovate, whitish, tinged with pinkish-brown, back gibbous in the middle, smooth, extremities rather channelled, aperture narrow, columella callously smooth.

Amphiperas Traillii, Adams, Pro. Zool. Soc. 1855, p. 222.

Hab. Malacca; Dr. Traill.

A very characteristic species, although the details of sculpture are somewhat obscurely developed. In form it is peculiarly slender and delicate.

Species 39. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM FORMOSUM. *Ov. testâ lanceolato-ovatâ, purpurascente-aurantiâ, dorso undique transversim inciso-striato, medio gibbosiusculo, extremitatibus canaliculato-productis, labro varicoso, conspicuè dentato-serrato,*

columellâ supernè callosâ, infernè attenuatâ, haud plicatâ.

The beautiful Ovulum. Shell lanceolately ovate, purplish-orange, back transversely incisely striated throughout, rather gibbous in the middle, extremities canaliculately produced, lip varicose, conspicuously dentately serrated, columella callous at the upper part, attenuated at the lower, not plaited.

Adams and Reeve, Moll. Voy. Samarang, p. 22. pl. 6. f. 6 *a*, *b*.

Calpurnus formosus, Adams.

Hab. East coast of Borneo; Belcher. Kino-O-Sima, Japan; Adams.

Conspicuously distinguished by its very neatly defined sculpture and bright colour.

40.a.

40.b.

40.c.

41.a.

41.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

OVULUM.

PLATE IX.

Species 40. (Fig. *a*, *c*, Mus. Cuming; Fig. *b*, Mus. Taylor.)

OVULUM LONGIROSTRATUM. *Ov. testâ elongato-angustâ, fulvescente-albâ, extremitatibus acuminato-rostratis, recurvis, dorso lævigato, medio modicè gibboso-angulato, labro calloso-reflexo, infernè subsinuato, columellâ lævigatâ.*

THE LONG-BEAKED OVULUM. Shell elongately narrow, fulvous-white, extremities acuminately beaked, recurved, back smooth, moderately gibbously angled in the middle, lip callously reflected, slightly sinuated at the lower part, columella smooth.

SOWERBY, Spes. Conch. pt. 1. f. 46. t. 48.

Hab. Adriatic Sea.

A very striking and remarkable species, if the locality hitherto quoted as its habitat be really correct.

Species 41. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM VOLVA. *Ov. testâ oblongo-ovatâ, ventricoso-inflatâ, rosaceo-carneâ, extremitatibus elongato-acuminatis, rostratis, modicè recurvis, dorso transversim lirato-striato, et inciso, labro crassè reflexo, infernè subsinuato, columellâ lævigatâ.*

THE SHUTTLE OVULUM. Shell oblong-ovate, ventricosely inflated, pinkish flesh-colour, extremities elongately acuminated, beaked, moderately recurved, back transversely rib-striated and incised, lip thickly reflected, slightly sinuated at the lower part, columella smooth.

Bulla volva, Linnæus, Syst. Nat. p. 1182.

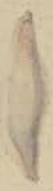
Ovula volva, Lamarck.

Hab. China and the Philippine Islands.

Specimens of this well-known species vary considerably in being more or less smooth or ridge-striated.

June, 1865.

42.a.



43.a.

43.b.

44.a.

45.a.

45.b.

44.b.

46.a.

46.b.

42.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

OVULUM.

PLATE X.

Species 42. (Fig. *a*, Mus. Taylor; Fig. *b*, Mus. Cuming.)

OVULUM SPELTA. *Ov. testâ oblongo-ovatâ, subventricosâ, carneo-rosaceâ, interdum fasciatâ, tenui, subpellucidâ, extremitatibus attenuato-rostratis, labro incrassato, infernè latè sinuato et truncato, columellâ obscurè contorto-plicatâ.*

THE SPELT OVULUM. Shell oblong-ovate, somewhat ventricose, flesh-rose, sometimes banded, thin, somewhat transparent, extremities attenuately beaked, lip thickened, broadly sinuated and truncated at the lower part, columella obscurely twistedly plaited.

Bulla spelta, Linnæus, Syst. Nat. p. 1182.
Ovula spelta, Lamarck.

Hab. Pacific Ocean.

The shortest and most ventricose of the beaked species collected in this Plate.

Species 43. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM ANGASI. *Ov. testâ lanceolato-ovatâ, subcompressâ, eburneâ, nitente, extremitatibus retusis, labro et columellâ crassè callosis, infernè modicè sinuatis, aperturâ perangustâ.*

ANGAS'S OVULUM. Shell lanceolately ovate, rather compressed, ivory-white, shining, extremities blunt, lip and columella thickly callous, moderately sinuated at the lower part, aperture very narrow.

ADAMS, MS. in Mus. Cuming.

Hab. Port Curtis, Australia.

The aperture of this delicate species is much contracted by the callous thickening of the lip and columella.

Species 44. (Fig. *a*, Mus. Cuming; Fig. *b*, Mus. Taylor.)

OVULUM ROSEUM. *Ov. testâ elongato-ovatâ, lævigatâ, nitente, aurantio-roseâ, intus vividè coloratâ, extremitatibus rectis, attenuato-rostratis, labro incrassato, infernè sinuato.*

THE ROSE OVULUM. Shell elongately ovate, smooth, shining, orange-rose, brightly coloured within, extremities straight, attenuately beaked, lip thickened, sinuated towards the lower part.

ADAMS, MS. in Mus. Taylor.

Hab. China Seas; Belcher.

Remarkable for its bright orange-rose colour, but scarcely distinguishable in form from *O. birostre*.

Species 45. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM BIROSTRE. *Ov. testâ elongato-ovatâ, rufescente-carneâ, interdum fasciatâ, lævigatâ, nitente, extremitatibus attenuato-rostratis, labro incrassato, infernè sinuato.*

THE TWO-BEAKED OVULUM. Shell elongately ovate, reddish flesh-colour, sometimes banded, smooth, shining, extremities attenuately beaked, lip thickened, sinuated at the lower part.

Bulla birostris, Linnæus, Syst. Nat. p. 1182.
Ovula birostris, Lamarck.
Radius brevirostris, Schumacher.

Hab. Japan. Eastern Seas.

The lip is sometimes rudely denticulated within, but this can hardly be relied upon as a character.

Species 46. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM PHILIPPINARUM. *Ov. testâ elongato-ovatâ, livido-carneâ, tenui, extremitatibus attenuatis, retusis, labro modicè incrassato, infernè latè sinuato, aperturâ supernè angustè coarctatâ.*

THE PHILIPPINE OVULUM. Shell elongately ovate, livid flesh-colour, thin, extremities attenuated, blunted, lip moderately thickened, broadly sinuated at the lower part, aperture narrowly contracted towards the upper part.

SOWERBY, Pro. Zool. Soc. 1848, p. 136.

Hab. Isle of Capul, Philippines; Cuming.

A delicately-formed species, more than usually attenuated towards the upper part, while the extremities are blunted, not acuminately beaked, as in the preceding species.

47.a.

48.a.

48.b.

49.a.

50.a.

50.b.

49.b.

51.a.

51.b.

43.b.

Sowerby, del et lith.

Vincent Brooks, Imp.

OVULUM.

PLATE XI.

Species 47. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM INDICUM. *Ov. testâ angustè ovatâ, subpyriformi, eburneâ, nitente, dorso supernè angulato-gibboso, extremitatibus brevibus, calloso-emarginatis, labro incrassato, columellâ subexcavatâ.*

THE INDIAN OVULUM. Shell narrowly ovate, somewhat pyriform, ivory-white, shining, back angularly gibbous round the upper part, extremities short, callously emarginated, lip thickened, columella slightly excavated.

Hab. Bombay.

A small, shining-white species, of which Mr. Cuming possesses two specimens from the coast of Bombay.

Species 48. (Fig. *a*, *b*, Mus. Taylor.)

OVULUM SEMINULUM. *Ov. testâ oblongo-ovatâ, rosaceo-carneâ, extremitatibus retusis, labro incrassato, infernè latè sinuato, columellâ supra et infra callosâ.*

THE LITTLE-SEED OVULUM. Shell oblong-ovate, pinkish flesh-colour, extremities blunt, lip thickened, broadly sinuated at the lower part, columella callous above and below.

SOWERBY, Spes. Conch. pt. i. f. 40.

Hab. Friendly Islands.

The back is slightly raised in this species, but not to say gibbous or angled.

Species 49. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM SIMILE. *Ov. testâ oblongo-ovatâ, purpureo-roseâ, dorso undique inciso-striato, extremitatibus calloso-retusis, labro incrassato, infernè latè sinuato.*

THE LIKE OVULUM. Shell oblong-ovate, purple-rose, back incisely striated throughout, extremities callously blunt, lip thickened, broadly sinuated at the lower part.

SOWERBY, Pro. Zool. Soc. 1848, p. 136.

Hab. ——?

Scarcely differing from *O. secale*, except in being transversely striated at the back.

Species 50. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM CALIFORNICUM. *Ov. testâ elongato-oblongâ, tenuiculâ, livido-purpureâ vel plumbeâ, dorso lævigato, labro modicè incrassato, flexuoso, extremitatibus subacuminato-productis, aperturâ patulâ, columellâ subexcavatâ, supernè obtusè obsoletè calloso-plicatâ.*

THE CALIFORNIAN OVULUM. Shell elongately oblong, livid-purple, or lead-colour, back smooth, lip moderately thickened, flexuous, extremities somewhat acuminately produced, aperture wide open, columella slightly excavated, obtusely obsoletely callously plaited at the upper part.

SOWERBY, MS. in Mus. Cuming.

Hab. California.

Of a peculiar livid, leaden-purple colour; the callous enamel of the lip and columella being of an orange blood-red.

Species 51. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM UNIPLICATUM. *Ov. testâ angustè oblongâ, tenuiculâ, albidâ vel aurantio-roseâ, extremitatibus subproductis, retusis, dorso transversim minutè striato, labro modicè incrassato, flexuoso, infernè latè sinuato, columellâ supernè uniplicatâ.*

THE ONE-PLAITED OVULUM. Shell narrowly-oblong, rather thin, whitish, or orange-rose, extremities rather produced, blunt, back transversely minutely striated, lip moderately thickened, flexuous, widely sinuated at the lower part, columella one-plaited at the upper part.

SOWERBY, Pro. Zool. Soc. 1848, p. 135.

Hab. Rio Janeiro. South Carolina.

A rather thin, flexuous shell, with a single winding plait at the upper extremity of the columella.

52.a.

53.a.

53.b.

54.a.

55.a.

55.b.

54.b.

56.a.

56.b.

52.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

OVULUM.

PLATE XII.

Species 52. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM FORMICARIUM. *Ov. testâ oblongo-ovatâ, tenuiculâ, rosaceâ, dorso transversim tenuistriato, extremitatibus subproductis, labro calloso-incrassato, columellâ supernè uniplicatâ, aperturâ latiusculâ.*

THE ANT OVULUM. Shell oblong-ovate, rather thin, rosy, back transversely finely striated, extremities somewhat produced, lip callously thickened, columella one-plaited at the upper part, aperture rather wide.

SOWERBY, Spes. Conch. pt. i. f. 39.

Hab. Eastern Seas.

A delicate, rose-coloured species, differing little from *O. secale.*

Species 53. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM ACICULARE. *Ov. testâ lanceolato-ovatâ, tenui, flexuosâ, livido-cinereâ aut violaceâ, semipellucidâ, extremitatibus retusè productis, labro tenuè reflexo, columellâ angustè involutâ, aperturâ latiusculâ.*

THE ACICULAR OVULUM. Shell lanceolately-ovate, thin, flexuous, livid ash-colour, or violet, semitransparent, extremities bluntly produced, lip thinly reflected, columella narrowly involuted, aperture rather wide.

LAMARCK, Anim. sans vert. vol. x. p. 472.

Hab. West Indies.

This species is mostly found adhering to the stems of *Gorgonia*, and partakes more or less of the form of its place of attachment.

Species 54. (Fig. *a*, *b*, Mus. Taylor.)

OVULUM RECURVUM. *Ov. testâ elongato-lanceolatâ, recurvâ, eburneâ, dorso transversim minutè striato, medio gibboso-angulato, extremitatibus acuminato-rostratis, labro et columellâ calloso-tumidis, nitentibus, aperturâ perangustâ, infernè conspicuè sinuatâ.*

THE RECURVED OVULUM. Shell elongately-lanceolate, recurved, ivory-white, back transversely minutely striated, gibbously angled in the middle, extremities acuminately beaked, lip and columella callously swollen, shining, aperture very narrow, conspicuously sinuated at the lower part.

ADAMS and REEVE, Moll. Voy. Samarang, p. 21, pl. vi. f. *a*, *b*, *c*.

Hab. China Seas; Belcher. Satanomosaki, Japan (at the depth of fifty-five fathoms); Adams.

A very characteristic species, elegantly acuminately beaked at the extremities, and distinguished by a very narrow aperture owing to the callous swelling of the lip and columella.

Species 55. (Fig. *a*, *b*, Mus. Taylor.)

OVULUM SUBREFLEXUM. *Ov. testâ lanceolato-ovatâ, eburneâ, dorso transversim minutè striato, extremitatibus subrectis, breviusculis, retusis, labro et columellâ calloso-tumidis, aperturâ subangustâ, infernè modicè sinuatâ.*

THE SLIGHTLY-REFLECTED OVULUM. Shell lanceolately-ovate, ivory-white, back transversely minutely striated, extremities nearly straight, rather short, blunt, lip and columella callously swollen, aperture rather narrow, moderately sinuated at the lower part.

ADAMS and REEVE, Moll. Voy. Samarang, p. 22. pl. vi. f. 10 *a*, *b*.

Hab. Bilaton, Eastern Seas; Belcher.

Shining-white, with callously-swollen lip and aperture, like the last species, but the extremities are neither acuminately beaked nor recurved.

Species 56. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM DEFLEXUM. *Ov. testâ lanceolato-ovatâ, candidâ, extremitatibus rectis, gradatim attenuatis, labro et columellâ tumidis, excavato-planatis, compressis, aperturâ perangustâ, infernè sinuatâ.*

THE DEFLECTED OVULUM. Shell lanceolately-ovate, white, extremities straight, gradually attenuated, lip and columella swollen, excavately flattened, compressed, aperture very narrow, sinuated at the lower part.

SOWERBY, Pro. Zool. Soc. 1848, p. 136.

Hab. Island of Ticao, Philippines; Cuming.

A peculiarly narrowly compressed species, with the lip and columella excavately flattened.

57.a.

58.a.

58.b.

59.a.

60.a.

60.b.

59.b.

61.a.

61.b

57.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

OVULUM.

PLATE XIII.

Species 57. (Fig. *a*, *b*, Mus. Taylor.)

OVULUM COARCTATUM. *Ov. testâ elongatâ, medio ventricosâ, fulvâ, dorso transversim minutè striato, extremitatibus coarctatis, columellâ depressiusculâ.*

THE CONTRACTED OVULUM. Shell elongated, ventricose in the middle, fulvous, back transversely minutely striated, extremities contracted, columella rather depressed.

ADAMS and REEVE, Moll. Voy. Samarang, p. 21. pt. 6. f. 2, *a*, *b*.

Hab. Straits of Sunda, near Java; Belcher.

A very small species of very simple character.

Species 58. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM ARCUATUM. *Ov. testâ angustè ovatâ, arcuatâ, nitente-albâ, dorso transversim striato, extremitatibus subretusis, labro incrassato, columellâ supernè obtusè uniplicatâ.*

THE ARCHED OVULUM. Shell narrowly ovate, arched, shining white, back transversely striated, extremities rather blunt, lip thickened, columella obtusely one-plaited at the upper part.

Hab. ——?

A shining white species, arcuately bent, with the extremities but little produced.

Species 59. (Fig. *a*, *b*. Mus. Cuming.)

OVULUM LANCEOLATUM. *Ov. testâ elongato-lanceolatâ, compressâ, aurantio-roseâ, dorso densè transversim striato, extremitatibus subretusis, labro et columellâ calloso-involutis, aperturâ perangustâ, infernè sinuatâ.*

THE LANCEOLATE OVULUM. Shell elongately lanceolate, compressed, orange-pink, back densely transversely striated, extremities rather blunt, lip and columella callously involute, aperture very narrow, sinuated at the lower part.

SOWERBY, Pro. Zool. Soc. 1848, p. 135.

Hab. Island of Luzon, Philippines; Cuming.

Curiously distinguished by its narrowly compressed, lanceolate form.

Species 60. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM VARIABILE. *Ov. testâ subelongato-ovatâ, sordidè albâ, extremitatibus subacuminatis, labro modicè incrassato, aperturâ latiusculâ.*

THE VARIABLE OVULUM. Shell somewhat elongately ovate, dull white, extremities slightly acuminated, lip moderately thickened, aperture rather wide.

C. B. ADAMS, MS. in Mus. Cuming.

Hab. ——?

Probably a West Indian species, straight, with the extremities slightly acuminated.

Species 61. (Fig. *a*, *b*, Mus. Taylor.)

OVULUM GRACILE. *Ov. testâ elongatâ, fusiformi, pallidè fulvâ, dorso rubro marginato, minutissimè striato, extremitatibus acuminato-rostratis, recurvis, labro subangulatim arcuato.*

THE SLENDER OVULUM. Shell elongated, fusiform, pale fulvous, back edged with red, very minutely striated, extremities acuminately beaked, recurved, lip somewhat angularly arched.

ADAMS and REEVE, Moll. Voy. Samarang, p. 22. pl. 6. f. 11, *a*, *b*, *c*.

Hab. East coast of Borneo; Belcher.

An extremely characteristic species, recurved and acuminately beaked at the extremities.

62.a.

63.a.

63.b.

64.a.

65.a.

65.b.

64.b.

66.a.

66.b.

62.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

OVULUM.

PLATE XIV.

Species 62. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM NEGLECTUM. *Ov. testâ subelongato-ovatâ, livido-purpureâ, extremitatibus attenuatis, brevibus, labro tenuè reflexo, aperturâ subpatulâ.*

THE NEGLECTED OVULUM. Shell somewhat elongately ovate, livid-purple, extremities attenuated, short, lip thinly reflected, aperture rather wide open.

C. B. ADAMS, MS. in Mus. Cuming.

Hab. —— ?

Allied to *O. aciculare*, but of a regular ovate form, with the aperture wide open.

Species 63. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM LIVIDUM. *Ov. testâ subangustè ovatâ, solidâ, livido-purpureâ, extremitatibus breviter acuminatis, labro incrassato, columellâ supernè obsoletè uniplicatâ, aperturâ subpatulâ.*

THE LIVID OVULUM. Shell rather narrowly ovate, solid, livid-purple, extremities shortly acuminated, lip thickened, columella obsoletely one-plaited at the top, aperture rather wide open.

Hab. Panama.

A more solid species than the preceding, with a nearly obsolete callous plait at the upper extremity of the columella.

Species 64. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM ANTILLARUM. *Ov. testâ elongato-ovatâ, livido-purpureâ, nitente, extremitatibus acuminatis, labro calloso-incrassato, aperturâ subpatulâ.*

THE WEST INDIA OVULUM. Shell elongately ovate, livid-purple, glossy, extremities acuminated, lip callously thickened, aperture rather wide open.

Hab. West Indies.

Of a much more glossy substance than either of the two preceding species, with the extremities more acuminated.

Species 65. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM SUBROSTRATUM. *Ov. testâ elongato-ovatâ, livido-purpureâ, nitente, extremitatibus acuminatis, labro calloso-incrassato, columellâ supernè uniplicatâ, aperturâ subpatulâ.*

THE SLIGHTLY-BEAKED OVULUM. Shell elongately ovate, livid-purple, shining, extremities acuminated, lip callously thickened, columella one-plaited at the upper part, aperture rather wide open.

SOWERBY, Pro. Zool. Soc. 1848, p. 136.

Hab. Bay of Honduras; Dyson.

Very like the preceding species, with the extremities acuminated.

Species 66. (Fig. *a*, *b*, Mus. Cuming.)

OVULUM SECALE. *Ov. testâ ovatâ, livido-purpureâ, solidiusculâ, extremitatibus retusis, labro calloso-incrassato, columellâ supernè uniplicatâ, aperturâ subpatulâ.*

THE RYE OVULUM. Shell ovate, livid-purple, rather solid, extremities blunt, lip callously thickened, columella one-folded at the upper part, aperture rather wide open.

SOWERBY, Spes. Conch. pt. 1. f. 36.

Hab. Eastern Seas; Belcher.

The original type of the allied species grouped together in this Plate.

OVULUM.

	Plate.	Species
aciculare, *Lamarck*	XII.	53
acuminatum, *Adams and Reeve*	VIII.	35
Adamsii, *Reeve*	V.	24
Adriaticum, *Sowerby*	II.	7
alabaster, *Reeve*	V.	23
alba, Schumacher	I.	3
Angasi, *Adams*	X.	43
angulosa, Lamarck	I.	4
Antillarum, *Reeve*	XIV.	64
arcuatum, *Reeve*	XIII.	58
bimaculatum (*Amphiperas*), Adams	III.	11
birostre (*Bulla*), Linnæus	X.	45
breve, *Sowerby*	II.	5
brevirostris (Radius), Schumacher	X.	45
bulla, *Adams and Reeve*	V.	20
bullatum, *Adams and Reeve*	VI.	26
Californicum, *Sowerby*	XI.	50
carneum (*Bulla*), Poiret	IV.	17
coarctatum, *Adams and Reeve*	XIII.	57
columba, Schubert and Wagner	I.	4
concinnum, *Adams and Reeve*	V.	21
deflexum, *Sowerby*	XII.	56
dentatum, *Adams and Reeve*	VIII.	36
dorsuosum, *Hinds*	VI.	27
emarginatum, *Sowerby*	VII.	34
formicarium, *Sowerby*	XII.	52
formosum, *Adams and Reeve*	VIII.	39
frumentum, *Sowerby*	VI.	25
fruticum, *Adams*	IV.	16
gibbosum (*Bulla*), Linnæus	VII.	32
gracile, *Adams and Reeve*	XIII.	61
hordaceum, *Lamarck*	VIII.	37
Indicum, *Reeve*	XI.	47
intermedium, *Sowerby*	VII.	33
lacteum, *Lamarck*	I.	1
lanceolatum, *Sowerby*	XIII.	59
lepida (Bulla), Dillwyn	IV.	15
lividum, *Reeve*	XIV.	63
longirostratum, *Sowerby*	IX.	40
margarita, *Sowerby*	III.	10
marginatum, *Sowerby*	II.	8
marginata (Amphiperas), Adams	V.	24
neglectum, *C. B. Adams*	XIV.	62
nubeculatum, *Adams and Reeve*	III.	12
obtusum, *Sowerby*	VII.	31
oviformis, Lamarck	I.	3
ovum (*Bulla*), Linnæus	I.	3
patulum (*Bulla*), Pennant	VII.	30
Philippinarum, *Sowerby*	X.	46
pudicum (*Amphiperas*), Adams	II.	6
punctatum, *Duclos*	V.	22
pyriforme, *Sowerby*	II.	9
pyrulinum (*Amphiperas*), Adams	IV.	19
recurvum, *Adams and Reeve*	XII.	54
rhodia (*Amphiperas*), Adams	IV.	18
roseum, *Adams*	X.	44
scitulum (*Radius*), Adams	VI.	29
secale, *Sowerby*	XIV.	66
seminulum, *Sowerby*	XI.	48
semistriatum, *Pease*	III.	13
simile, *Sowerby*	XI.	49
spelta (*Bulla*), Linnæus	X.	42
striatulum, *Sowerby*	VI.	28
subreflexum, *Adams and Reeve*	XII.	55
subrostratum, *Sowerby*	XIV.	65
tortile (*Cypræa*), Martyn	I.	4
Traillii (*Amphiperas*), Adams	VIII.	38
triticeum, *Lamarck*	IV.	15
umbilicatum, *Sowerby*	III.	14
uniplicatum, *Sowerby*	XI.	51
variabile, *C. B. Adams*	XIII.	60
verrucosum (*Bulla*), Linnæus	I.	2
volva (*Bulla*), Linnæus	IX.	41

MONOGRAPH

OF THE GENUS

ERATO

"O Nature! all-sufficient! over all!
Enrich me with the knowledge of thy works."

Thomson.

1.a.

2.a.

2.b.

3.a.

4.a.

4.b.

3.b.

5.a.

5.b.

1.b.

Sowerby, del et lith.

Vincent Brooks Imp.

ERATO.

PLATE I.

Genus ERATO, *Risso.*

Testa plus minus pyriformis, ad basin emarginata, spirâ brevi, anfractibus supernè tumidiusculis, infernè plerumque constrictis, columellâ labroque denticulatis, aperturâ angustâ.

Shell more or less pear-shaped, emarginated at the base, spire short, whorls rather swollen at the upper part, generally constricted at the lower, columella and lip denticulated, aperture narrow.

Erato is a form of *Marginella*, in which the columella, like the lip, is not sculptured until it arrives at maturity. In *Marginella* the columellar axis of the shell is plaited from an early stage of growth. In *Erato* the columella is smooth until a row of denticulations is formed upon it simultaneously with the denticulation and completion of the lip.

The geographical distribution of *Erato* is also different from that of *Marginella*. *Erato* is not known at the principal station of the latter genus, West Africa; and at the next principal habitat of *Marginella*, West Indies, only one *Erato* has been collected. *E. lævis*, the most characteristic type of the genus, inhabits not only the Mediterranean, but is found, in more or less scarcity, on all the British shores. There are eleven more species in the Eastern Hemisphere, one at Japan, four at the Philippine Islands, one at Borneo, one China Sea, one Mauritius, one Sandwich Islands, and two East Indies, one being from the coast of Bombay. In the Western Hemisphere we have two from California, one from Panama, one from West Columbia, and one from Porto Rico. None are recorded from Australia.

Species 1. (Fig. *a*, *b*, Mus. Cuming.)

ERATO COLUMBELLA. *Erat. testâ pyriformi, flavescente, livido-carneo tinctâ, spirâ brevissimâ, anfractibus supernè tumido-globosis, infernè constrictis, labro tumido, subvaricoso.*

THE COLUMBELLA ERATO. Shell pyriform, yellowish, stained with livid flesh-colour, spire very short, whorls tumidly globose round the upper part, constricted at the lower, lip swollen, somewhat varicose.

MENKE, Zeitschr. für Malac. 1847, p. 183.

Erato leucophæa, Gould.

Hab. California.

Distinguished by its globosely swollen form and livid flesh-colour, the lip being of a pallid yellow.

Species 2. (Fig. *a*, *b*, Mus. Cuming.)

ERATO CALLOSA. *Erat. testâ conico-pyriformi, livido-albâ, carneo interdum tinctâ, callosâ, nitente, spirâ exsertiusculâ, anfractibus supernè tumidis, labro tumido.*

THE CALLOUS ERATO. Shell conically pyriform, livid-white, sometimes tinged with flesh-colour, callous, shining, spire rather exsertèd, whorls swollen at the upper part, lip swollen.

ADAMS and REEVE, Moll. Voy. Samarang, pp. 10, 25. f. 32. *a*, *b*.

Hab. China Sea.

Although the spire of this species is short and rather obtuse, it is more exserted than in the preceding species. The surface of the shell is rather thickly enamelled.

Species 3. (Fig. *a*, *b*, Mus. Cuming.)

ERATO VITELLINA. *Erat. testâ obtusè pyriformi, globosiusculâ, livido-albâ, plus minus rufescente-carneâ aut vitellinâ, anfractibus subinflatis, aperturâ latâ, columellâ subconspicuè corrugato-serratâ.*

THE YOLK ERATO. Shell obtusely pyriform, rather globose, livid-white, more or less reddish-flesh or yolk-colour, whorls rather inflated, aperture broad, columella rather conspicuously wrinkle-serrated.

HINDS, Moll. Voy. Sulphur, pl. 13. f. 22, 23.

Hab. California.

This is the largest species of the genus, and is especially characterized by its broad and Cowrey-like growth.

Species 4. (Fig. *a*, *b*, Mus. Cuming.)

ERATO SCABRIUSCULA. *Erat. testâ subelongato-ovatâ, vix pyriformi, violaceo-plumbeâ, spirâ conicâ, anfractibus parum tumidis, undique grano-punctatis, labro medio tumido, columellâ subconspicuè constricto-corrugatâ.*

THE ROUGH ERATO. Shell rather elongately ovate, but

little pyriform, violet-lead colour, spire conical, whorls but little swollen, grain-dotted throughout, lip swollen in the middle, columella rather conspicuously constricted throughout.

Gray, Sowerby, Conch. Illus. f. 46.

Marginella cypræola, Sowerby.

Marginella granum, Kiener.

Hab. St. Elena, West Columbia; Cuming.

Peculiarly distinguished from the rest of the genus by its granulated surface and violet-lead colour.

—

Species 5. (Fig. *a*, *b*, Mus. Cuming.)

Erato lævis. *Erat. testâ obtusè pyriformi, sordidè albâ, spirâ modicè exsertâ, anfractibus supernè angulato-tumidis, columellâ labroque parum serratis.*

The smooth Erato. Shell obtusely pyriform, dull white, spire moderately exserted, whorls angularly swollen round the upper part, columella and lip but little serrated.

Voluta lævis, Donovan, Brit. Shells, vol. v. pl. 165.

Bulla voluta, Montagu.

Voluta fusiformis, Turton.

Marginella Donovani, Payraudeau.

Marginella voluta, Fleming.

Volvaria Donovani, Blainville.

Erato lævis, Gray.

Columbella lævis, Brown.

Marginella lævis, Philippi.

Hab. Mediterranean. British Seas.

The serrated sculpture of this species, which is sparingly diffused at a depth of about fifty fathoms on all our British shores, is generally more or less obsolete. It was named *Voluta lævis* by Donovan, in 1803, in the concluding volume of his 'British Shells.' Montagu's name of *Bulla voluta*, which has been thought by some to have priority, was not published until 1808, when it appeared in the Supplement to his 'Testacea Britannica.'

6.a.

7.a.

7.b.

8.a.

9.a.

9.b.

8.b.

10.a.

10.b.

6.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

ERATO.

PLATE II.

Species 6. (Fig. *a*, *b*, Mus. Cuming.)

ERATO ANGULIFERA. *Erat. testâ ovato-pyriformi, sordidè albâ, spirâ obtusè conicâ, anfractibus supernè angulato-tumidis, infernè constrictis, labro et columellâ obeso-tumidis, supra spiram productis, aperturâ perangustâ.*

THE ANGLED ERATO. Shell ovately pyriform, dull-white, spire obtusely conical, whorls angularly swollen round the upper part, constricted at the lower, lip and columella stoutly swollen, produced above the spire, aperture very narrow.

SOWERBY, MS. in Mus. Cuming.

Hab. Borneo.

This little species is distinguished by the prominent swollen extension of the lip and columella.

Species 7. (Fig. *a*, *b*, Mus. Cuming.)

ERATO GALLINACEA. *Erat. testâ trigono-pyriformi, sordidè albâ, callosâ, spirâ conicâ, anfractibus supernè angulatis, infernè constrictis, rostratis, labro obeso-tumido, supernè conspicuè productâ.*

THE HEN ERATO. Shell triangularly pyriform, dull-white, callous, spire conical, whorls angled at the upper part, constricted and beaked at the lower, lip stoutly swollen, conspicuously produced at the upper part.

HINDS, MS. in Mus. Cuming.

Hab. Island of Mindoro, Philippines (in sandy mud, at the depth of eight fathoms); Cuming.

An angularly constricted species, named from its fancied resemblance to a trussed hen.

Species 8. (Fig. *a*, *b*, Mus. Cuming.)

ERATO HÆMATINA. *Erat. testâ oblongo-pyriformi, versus basin subangulatâ, hepaticâ, spirâ subexsertâ, labro incrassato, flexuoso, columellâ validè quadriplicatâ, plicis transversis.*

THE LIVER-COLOURED ERATO. Shell oblong-pyriform, somewhat angular towards the base, liver-coloured, spire rather exserted, lip thickened, flexuous, columella strongly four-plaited, plaits transverse.

MENKE, MS. in Mus. Cuming.

Hab. Porto Rico.

Conspicuously distinguished by the strong transverse plaits of the columella. The colouring is also peculiar.

Species 9. (Fig. *a*, *b*, Mus. Cuming.)

ERATO LACHRYMA. *Erat. testâ obeso-pyriformi, sordidè albâ, carneo-fuscescente obscurè trifasciatâ, spirâ breviusculâ, anfractibus tumidis, ad basin subconstrictis, labro obtusè tumido.*

THE TEAR ERATO. Shell stoutly pyriform, dull-white, obscurely three-banded with flesh-brown, spire rather short, whorls swollen, rather constricted at the base, lip obtusely swollen.

GRAY, Sowerby, Conch. Illus. f. 48.

Lachryma trifasciata, Humphreys.

Hab. Japan; Dr. Siebold.

The banded colouring of this species is only very faintly indicated.

Species 10. (Fig. *a*, *b*, Mus. Cuming.)

ERATO MAUGERIÆ. *Erat. testâ subgloboso-pyriformi, sordidè lividâ, nitente, spirâ parvâ, anfractibus ad basin modicè constrictis, labro tumido, aperturâ latiusculâ.*

MAUGER'S ERATO. Shell somewhat globosely pyriform, dull livid-colour, shining, spire small, whorls moderately constricted at the base, lip swollen, aperture rather wide.

GRAY, Sowerby, Conch. Illus. f. 47.

Hab. Panama.

An elegantly-formed shell, of a peculiar dull livid-colour, but shining.

11.

12

13.

14a.

15.

16.

14b.

17.a.

17.b.

18.

Sowerby, del. et lith.

Vincent Brooks, Imp.

ERATO.

PLATE III.

Species 11. (Mus. Cuming.)

ERATO MINUTA. *Erat. testâ subglobosâ, pellucidâ, vitreâ, spirâ parvâ, anfractibus rotundato-inflatis, labro tenuiculo, columellâ ad basin contractâ.*

THE MINUTE ERATO. Shell subglobose, transparent, glassy, spire small, whorls rotundately inflated, lip rather thin, columella contracted at the base.

Hab. Island of Ticao, Philippines; Cuming.

A minute glassy shell, partaking very much of the character of *Marginella.*

Species 12. (Mus. Cuming.)

ERATO CORRUGATA. *Erat. testâ ovatâ, pyriformi, flavescente-albâ, spirâ obtusâ, anfractibus tumidiusculis, supernè minutè obscurè corrugatis, columellâ labroque vælde tumidis, aperturâ perangustâ.*

THE WRINKLED ERATO. Shell ovately pyriform, yellowish-white, spire obtuse, whorls rather swollen, obscurely minutely wrinkled at the upper part, columella and lip much swollen, aperture very narrow.

HINDS, MS. in Mus. Cuming.

Hab. Island of Mindoro, Philippines (in sandy mud, at a depth of eight fathoms); Cuming.

There are but the faintest possible indications of wrinkles in this species.

Species 13. (Mus. Cuming.)

ERATO ANGISTOMA. *Erat. testâ globoso-pyriformi, lividoalbâ, nitente, spirâ parvâ, anfractibus supernè rotundatis, minutissimè corrugatis, infernè constrictis, labro tumido, subangulato-producto.*

THE NARROW-MOUTH ERATO. Shell globosely pyriform, livid-white, shining, spire small, whorls rounded, very minutely wrinkled at the upper part, constricted at the lower, lip swollen, somewhat angularly produced.

SOWERBY, Conch. Illus. f. 51.

Hab. East Indies.

Chiefly distinguished by its globose form, much constricted at the base.

Species 14. (Fig. *a*, *b*, Mus. Cuming.)

ERATO SULCIFERA. *Erat. testâ subtrigono-pyriformi, sordidè albâ, obscurè fasciatâ, spirâ exsertiusculâ, anfractibus supernè subangulatis, labro tumido, aperturâ angustâ.*

THE GROOVED ERATO. Shell somewhat triangularly pyriform, dull white, obscurely banded, spire rather exserted, whorls slightly angled round the upper part, lip swollen, aperture narrow.

GRAY, Sowerby, Conch. Illus. f. 46.

Hab. Philippine Islands; Cuming.

Of a somewhat triangular form, with the spire more than usually exserted.

Fig. 15. (Mus. Cuming.)

This specimen is named in Mr. Cuming's collection *E. guttata*, but it is in such a bad state that I must refrain from describing it as a species.

Species 16. (Mus. Cuming.)

ERATO PELLUCIDA. *Erat. testâ subgloboso-pyriformi, pellucido-albâ, nitente, spirâ conicâ, anfractibus supernè declivi-angulatis, labro tumido, varicoso, aperturâ angustâ.*

THE TRANSPARENT ERATO. Shell somewhat globosely pyriform, transparent white, shining, spire conical, whorls slopingly angled round the upper part, lip swollen, varicose, aperture narrow.

Hab. Bombay.

A small East Indian species, distinguished by the sloping angularity of the upper part of the whorls, and by the transparent substance of its shell, the internal columellar axis being visible throughout.

Species 17. (Fig. *a*, *b*, Mus. Cuming.)

ERATO SANDWICENSIS. *Erat. testâ subelongato-pyriformi, sordidè albâ, supra et infra fuscescente latifasciatâ, spirâ conico-exsertâ, anfractibus supernè obtusè angulatis, aperturâ angustâ.*

THE SANDWICH ERATO. Shell somewhat elongately py-

riform, dull white, broadly banded above and below with pale-brown, spire conically exserted, whorls obtusely angled round the upper part, aperture narrow.

PEASE, Pro. Zool. Soc. p.

Hab. Sandwich Islands.

An elegantly-formed species, of rather elongated growth, very characteristically banded.

Species 18. (Mus. Cuming.)

ERATO NANA. *Erat. testâ obtusè pyriformi, albâ, spirâ conicâ, anfractibus supernè longitudinaliter plicato-corrugatis, labro tumido.*

THE DWARF ERATO. Shell obtusely pyriform, white, spire conical, whorls longitudinally plicately wrinkled, lip swollen.

DUCLOS, MS. in Mus. Cuming.

Hab. —— ?

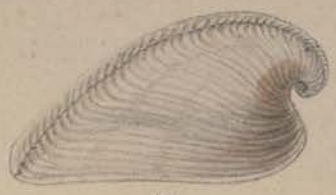
The specimens are much worn, but they undoubtedly present the unusual character of being longitudinally plicately wrinkled.

MONOGRAPH

OF THE GENUS

CARINARIA.

"Great God, it is thy work, and therefore good."
Quarles.

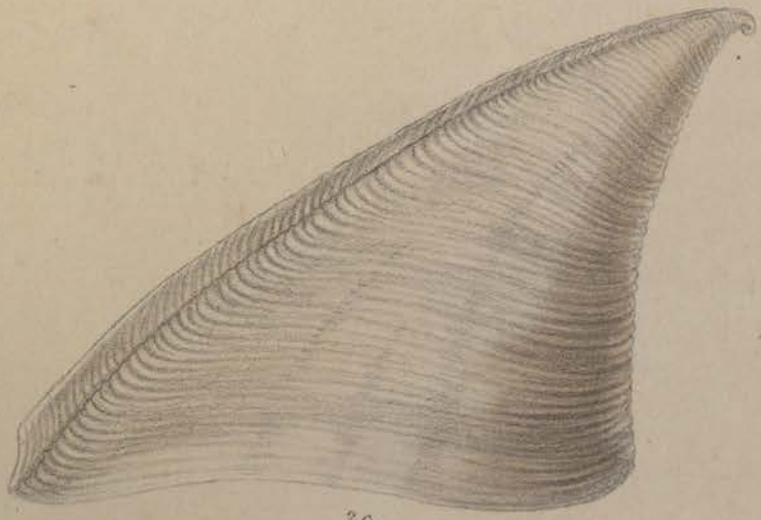


1.a.

2.a.

1.b.

2.b.



2.c.

Sowerby, del. et lith.

Vincent Brooks, Imp.

CARINARIA.

PLATE I.

Genus CARINARIA, Lamarck.

Testa pileiformis, tenuissima, pellucido-vitrea, concentricè corrugata, dorso laminato-carinato, apice spiraliter uncinato.

Shell cap-shaped, very thin, transparent glassy, concentrically wrinkled, back laminately keeled, apex spirally hooked.

The very delicate, transparent, cap-shaped shell, long known to conchologists as the 'Glassy Nautilus,' has no relation with the cephalopod of that name. It belongs externally to a mollusk many times larger than itself, of very curious structure and habit. The *Carinaria* is an oblong gelatinous mass, swollen and transparent, having at one end a well-developed head, with tentacles and eyes, and a powerfully armed proboscis, while the viscera and branchiæ are gathered together in an external nucleus, situated almost at its other extremity. The only organ contained in this gelatinous mass is a gut of connection between these distant parts, the head and the external visceral and branchial nucleus, and it is as a cap-like covering to the latter that this wonderfully delicate and brittle shell is developed. The *Carinaria* is an oceanic swimmer, darting about with some rapidity, by means of a ventral fin, provided with a sucker for obtaining attachment to any foreign body when at rest.

In the Indian Ocean, probably in the neighbourhood of the Moluccas, is a fine species, *C. vitrea*, of which the shell has been known for a century and more, but there is no record of the animal ever having been observed. Of the Mediterranean species, *C. fragilis*, the animal has been frequently captured, and a few specimens of a small species, *C. Atlantica*, were taken in the trawl at twilight, by Capt. Sir E. Belcher, in the North Atlantic Ocean, in the 'Samarang.' M. D'Orbigny has described a species, *C. punctata*, in his 'Voyage dans l'Amérique méridionale,' but it is unknown to me.

Species 1. (Fig. *a*, *b*, Mus. Cuming.)

CARINARIA FRAGILIS. *Car. testâ subdepressâ, apice conspicuè involuto.*

THE FRAGILE CARINARIA. Shell rather depressed, apex conspicuously involute.

BORY DE ST. VINCENT, Voy. aux Iles d'Afrique, vol. i. p. 143. pl. 6. f. 4.

Carinaria Mediterranea, Deshayes.

Hab. Mediterranean.

Chiefly distinguished by its depressed form, and consequent involution of the apex.

Species 2. (Fig. *a*, *b*, *c*, Mus. Cuming.)

CARINARIA VITREA. *Car. testâ suberectâ, apice parum involuto.*

THE GLASSY CARINARIA. Shell rather erect, with the apex but little involute.

Nautilus vitreus, Argenville, Conch. App. pl. 1. f. B.

Patella cristata, Linnæus.

Argonauta vitrea, Gmelin.

Patella vitrea, Schroeter.

Carinaria vitrea, Lamarck.

Carinaria gracilis, Reeve.

Hab. Indian Ocean.

Uniformly of large size, more attenuately erect, with the apex only moderately involute.

Species 3. (Mus. ——?)

CARINARIA ATLANTICA. *Car. testâ parvâ, modicè depressâ, apice subinvoluto, carinâ latâ.*

THE ATLANTIC CARINARIA. Shell small, moderately depressed, with the apex rather involute, keel broad.

ADAMS and REEVE, Moll. Voy. Samarang, p. 63. pl. 13. f. 12.

Hab. North Atlantic Ocean.

A small, broad-keeled species.

MONOGRAPH

OF THE GENUS

TORNATELLA.

"Launch then the skiff; ply well the scraping dredge!
Or, if it likes thee better, search the shore."—*Landsborough.*

1.a.

2.a.

2.b.

1.b.

3.a.

3.b.

1.c.

4.a.

4.b.

4.c.

. Sowerby, del. et lith.

Vincent Brooks, Imp.

TORNATELLA.

PLATE I.

Genus TORNATELLA, Lamarck.

Testa cylindraceo-ovata, plerumque transversim lineari-sulcata, spirâ parvâ, aperturâ oblongâ, columellâ ad basin validè contorto-plicatâ, interdum plicâ secundâ plus minus obsoletâ.

Shell cylindrically ovate, generally transversely linearly grooved, spire small, aperture oblong, columella strongly twistedly plaited at the base, with sometimes a second plait, which is more or less obsolete.

The genus *Tornatella* comprises a few characteristic species, distinguished by a cylindrically ovate short-spired form of shell, having a remarkably strongly-developed twisted plait at the base, which, unlike that of the great majority of gasteropodous mollusks, is not emarginated or channelled. For the sake of convenience, a few small species are added, constituting the genus *Leucotina* of Adams, in which the spire is more acuminately turbinated, and the columellar plait only very faintly developed. All, with one or two rather conspicuous exceptions, are transversely linearly grooved, and in most species the grooves are finely punctured throughout. The typical species of *Tornatella* are all inhabitants of the Eastern Seas, and we have a fine one, *T. tornatilis*, ranging throughout the seas of Europe. Of the *Leucotina* species one is from the China Seas, one from Hongkong, and one from the Bay of New York.

Species 1. (Fig. *a*, *b*, *c*, Mus. Cuming.)

TORNATELLA COCCINATA. *Torn. testâ cylindraceo-ovatâ, subobesâ, undique transversim punctato-sulcatâ, albâ, punctis coccineis aut cærulescentibus profusè aspersâ, apice acuto, columellâ biplicatâ, superiore subobscurâ, inferiore validè prominente, duplicatâ.*

THE SCARLET TORNATELLA. Shell cylindrically ovate, rather stout, transversely punctured-grooved throughout, white, profusely sprinkled with scarlet or bluish dots, apex sharp, columella two-plaited, the upper rather obscure, the lower very prominent, duplicate.

REEVE, Pro. Zool. Soc. 1842, p. 60; Conch. Syst. vol. ii. pl. 206. f. 10.

Hab. Cagayan, Province of Misamis, Island of Mindanao, Philippines (dredged from sandy mud, at the depth of twenty-five fathoms); Cuming. Singapore; Cuming.

This very characteristic species is of a peculiarly swollen cylindrical form. The typical scarlet-coloured variety is from the Philippine Islands, the dark leaden-blue variety from Singapore.

Species 2. (Fig. *a*, *b*, Mus. Cuming.)

TORNATELLA FLAMMEA. *Torn. testâ obeso-ovatâ, transversim undique densè punctato-sulcatâ, albâ, maculis crescentiformibus aut flammis rufescentibus strigatâ, spirâ breviusculâ, columellâ validè uniplicatâ.*

THE FLAMED TORNATELLA. Shell stoutly ovate, closely densely punctured-grooved throughout, white, streaked with reddish flames, or crescent-shaped spots, spire rather short, columella strongly one-plaited.

Voluta flammea, Gmelin, Syst. Nat. p. 3435.
Bulimus variegatus, Bruguière.
Tornatella flammea, Lamarck.

Hab. Java. Island of Ticao, and Correjidor, Philippines (dredged at a depth of about seven fathoms); Cuming.

The markings of this beautiful species consist normally of somewhat square crescent-shaped blotches, which in varieties run into one another and form confused longitudinal streaks.

Species 3. (Fig. *a*, *b*, Mus. Cuming.)

TORNATELLA SOLIDULA. *Torn. testâ oblongo-ovatâ, subcylindraceâ, transversim undique densè punctato-sulcatâ, albâ, maculis parvis quadratis cæruleo-nigricantibus profusè irregulariter aspersâ, spirâ plus minus conico-elevatâ, columellâ validè uniplicatâ.*

THE SOLID TORNATELLA. Shell oblong-ovate, somewhat cylindrical, transversely deeply punctured-grooved throughout, white, profusely irregularly sprinkled with small square blue-black spots, spire more or less conically raised, columella strongly one-plaited.

Voluta solidula, Linnæus, Syst. Nat. p. 1
Bulla solidula, Linnæus.
Helix nævia, Gmelin.
Bulimus solidulus, Bruguière.

Tornatella solidula, Lamarck.

Hab. Philippine Islands (in sandy mud, at from six to twenty-five fathoms); Cuming.

In this species the colouring is also very irregular, the dots running into confused longitudinal streaks.

Species 4. (Fig. *a*, *b*, *c*, Mus. Cuming.)

TORNATELLA GLABRA. *Torn. testâ cylindraceo-ovatâ, glabrâ, nitente, transversim undique densè punctato-sulcatâ, albâ, maculis griseis umbratis profusè nebulatâ, apice modicè conico, acuto, columellâ biplicatâ, plicâ superiore subobscurâ, inferiore valde prominente, interdum duplicatâ.*

THE SMOOTH TORNATELLA. Shell cylindrically ovate, smooth, shining, transversely densely punctured-grooved throughout, white, profusely clouded with grey-shaded spots, apex moderately conical, sharp, columella two-plaited, upper plait rather obscure, lower very prominent, sometimes duplicate.

REEVE, Pro. Zool. Soc. 1842, p. 60; Conch. Syst. vol. ii. pl. 206. f. 12.

Hab. Island of Negros, Philippines; Cuming.

This species bears a strong general resemblance to *T. solidula*, but is in reality very distinct. The surface is uniformly smoother, more glossy, the colouring is not in solid dots, but in light dots shaded on one side, and the columella has a second obscure plait.

5.

6.a.

6.b.

7.a.

8.a.

8.b.

7.b.

9.a.

9.b.

9.c.

TORNATELLA.

PLATE II.

Species 5. (Mus. Cuming.)

TORNATELLA NITIDULA. *Torn. testâ subabbreviato-ovatâ, solidâ, lævigatâ, nitente, ad basin lineari-sulcatâ, rosaceo-carneâ, spirâ parvâ, acutâ, columellâ biplicatâ, plicâ superiore ferè obsoletâ, inferiore valdè prominente.*

THE SHINING TORNATELLA. Shell rather shortly ovate, solid, smooth, shining, linearly grooved at the base, pinkish flesh-colour, spire small, sharp, columella two-plaited, upper plait nearly obsolete, lower very prominent.

LAMARCK, Anim. sans vert. p. 42.

Hab. Singapore; Island of Bohol, Philippines (in sandy mud, at the depth of eleven fathoms); Cuming.

A very solid, callous shell, grooved at the base only.

Species 6. (Fig. *a*, *b*, Mus. Cuming.)

TORNATELLA TESSELLATA. *Torn. testâ subcylindraceo-ovatâ, transversim irregulariter punctato-sulcatâ, albâ, maculis carneis tessellatâ, apice acuto, columellâ biplicatâ, plicâ superiori ferè obsoletâ.*

THE TESSELLATED TORNATELLA. Shell somewhat cylindrically ovate, transversely irregularly punctured-grooved, white, tessellated with flesh-tinted spots, apex sharp, columella two-plaited, the upper plait nearly obsolete.

REEVE, Pro. Zool. Soc. 1842, p. 60.

Hab. Red Sea (on the sands at low water); Dr. Rüppell.

A small species, tessellated with spots of a pinkish flesh-colour.

Species 7. (Fig. *a*, *b*, Mus. Cuming.)

TORNATELLA TORNATILIS. *Torn. testâ oblongo-ovatâ, transversim undique densè lirato-striatâ, sordidè carneâ, fasciis albis nunc unâ nunc duabus cingulatâ, spirâ subexsertâ, columellâ uniplicatâ.*

THE TURNED TORNATELLA. Shell oblong-ovate, transversely closely rib-striated throughout, dull flesh-colour, encircled with one or two white bands, spire somewhat exserted, columella one-plaited.

Voluta tornatilis, Linnæus, Syst. Nat. p. 1187.
Auricula bifasciata, Martini.
Turbo ovalis, Da Costa.
Bulimus tornatilis, Bruguière.
Tornatella fasciata, Lamarck.
Tornatella tornatilis, Fleming.
Speo bifasciatus, Risso.
Tornatella pellucida, Macgillivray.
Tornatella pusilla, Macgillivray.
Actæon tornatilis, Alder.

Hab. European Seas, from the coasts of Norway to the Mediterranean (in sandy mud, from the verge of low water to the depth of sixty fathoms); Forbes and Hanley.

This well-known species is encircled sometimes with two white bands, sometimes with only one.

Species 8. (Fig. *a*, *b*, Mus. Cuming.)

TORNATELLA VIRGATA. *Torn. testâ obeso-ovatâ, transversim undique tenuè lineari-sulcatâ, eburneâ, nigro conspicuè obliquè virgatâ, spirâ brevi, subobtusâ, apice acutâ, columellâ uniplicatâ.*

THE STREAKED TORNATELLA. Shell stoutly ovate, transversely finely linearly grooved throughout, ivory-white, conspicuously obliquely streaked with black, spire short, rather obtuse, apex sharp, columella one-plaited.

REEVE, Pro. Zool. Soc. 1842, pl. 61; Conch. Syst. vol. ii. pl. 206. f. 8, 9.

Hab. Island of Masbate, Philippines (in sandy mud, at the depth of seven fathoms); Cuming.

Singularly distinct from any other species of the genus.

Species 9. (Fig. *a*, *b*, *c*, Mus. Cuming.)

TORNATELLA SUTURALIS. *Torn. testâ ovatâ, nunc abbreviatâ, obesâ, nunc angustâ, transversim undique densè punctato-striatâ, albâ punctis nigris peculiariter piperitâ, apice acuto, columellâ uniplicatâ.*

THE SUTURED TORNATELLA. Shell ovate, sometimes short, stout, sometimes narrow, transversely densely punctured-striated throughout, white, peculiarly peppered with black dots, apex sharp, columella one-plaited.

ADAMS, MS. in Mus. Cuming.

Hab. Japan; Adams. Puerto Galero, Island of Mindoro, Philippines (dredged from the depth of six fathoms); Cuming.

There is a very characteristic peculiarity about the dotted painting of this species, such as to distinguish it at once from that of *T. solidula*.

10.

11.a.

11.b.

12.a.

13.a.

13.b.

12.b.

14.a.

14.b.

15.

Sowerby, del. et lith.

Vincent Brooks, Imp.

TORNATELLA.

PLATE III.

Species 10. (Mus. Cuming.)

TORNATELLA FUMATA. *Torn. testâ angustè ovatâ, transversim undique densè lineari-sulcatâ, fulvescente-albâ, nigro irregulariter inquinatâ, spirâ subexsertâ, columellâ biplicatâ, plicâ inferiore validè duplicatâ.*

THE SMOKED TORNATELLA. Shell narrowly ovate, transversely densely linearly grooved throughout, fulvous white, irregularly smeared with black, spire rather exserted, columella two-plaited, lower plait strongly duplicate.

Hab. Australia.

The disposition of the colouring-matter, which is not an unimportant feature in this genus, is in longitudinal smears, not arising, as in varieties of *T. solidula*, from confusion in a normal pattern of dots.

Species 11. (Fig, *a*, *b*, Mus. Cuming.)

TORNATELLA SIEBALDII. *Torn. testâ ovato-conicâ, transversim undique densè striatâ, livido-rubicundâ, ad suturas albo fasciatâ, spirâ acutè exsertâ, columellâ uniplicatâ.*

SIEBALD'S TORNATELLA. Shell ovately conical, transversely densely striated throughout, livid ruddy colour, banded with white at the sutures, columella one-plaited.

REEVE, Pro. Zool. Soc. 1842, p. 61.

Hab. Japan; Dr. Siebald.

Although twenty-three years have elapsed since I described this species, the value of it has not been confirmed by the discovery of other specimens, and I begin to fear it may be only a variety of the European *T. tornatilis*.

Species 12. (Fig. *a*, *b*, Mus. Cuming.)

TORNATELLA CUMINGII. *Torn. testâ subalbreviato-ovatâ, tumidiusculâ, transversim undique densissimè punctato-sulcatâ, sordidè fulvescente-rubidâ, spirâ parvâ, acutâ, columellâ uniplicatâ.*

CUMING'S TORNATELLA. Shell rather shortly ovate, somewhat swollen, transversely very densely punctured-grooved throughout, dull fulvous ruddy colour, spire small, sharp, columella one-plaited.

Acteon Cumingii, Adams, MS. in Mus. Cuming.

Hab. Rio Janeiro; Capt. A. Martin.

A rather swollen, closely-grooved species, of a dull fulvous ruddy colour, without marking of any kind.

Species 13. (Fig. *a*, *b*, Mus. Cuming.)

TORNATELLA PUDICA. *Torn. testâ ovatâ, transversim undique densissimè lirato-striatâ, sordidè albâ, spirâ subexsertâ, columellâ uniplicatâ.*

THE CHASTE TORNATELLA. Shell ovate, transversely very densely ridge-striated throughout, dead-white, spire rather exserted, columella one-plaited.

Acteon pudicus, Adams, MS. in Mus. Cuming.

Hab. Cagayan, Island of Mindanao, Philippines (dredged from the depth of twenty-five fathoms); Cuming.

The single specimen from which the species is described is in a dead, colourless state, but the form and sculpture show it to be distinct from any previously described.

Species 14. (Fig. *a*, *b*, Mus. Cuming.)

TORNATELLA SENEGALENSIS. *Torn. testâ angustè ovatâ, subpyramidali, transversim undique lineariter punctato-sulcatâ, livido-albicante, spirâ subacutè exsertâ, columellâ uniplicatâ.*

THE SENEGAL TORNATELLA. Shell narrowly ovate, somewhat pyramidal, transversely linearly punctured-grooved throughout, livid white, spire rather sharply exserted, columella one-plaited.

PETIT, MS. in Mus. Cuming.

Hab. Senegal.

A very distinct species of light structure, linearly grooved throughout with great regularity.

Species 15. (Mus. Cuming.)

TORNATELLA INSCULPTA. *Torn. testâ ovatâ, transversim undique densissimè punctato-sulcatâ, albidâ, maculis*

rubido-roseis subobscurè aspersâ, suturis subindistinctis, columellâ biplicatâ, plicâ superiore subobsoletâ, inferiori prominente, duplicatâ.

The engraved Tornatella. Shell ovate, transversely very densely punctured-grooved throughout, whitish, rather obscurely sprinkled with ruddy rose spots, sutures rather indistinct, columella two-plaited, upper plait rather obscure, lower prominent, duplicate.

Reeve, Pro. Zool. Soc. 1843, p. 62.

Hab. Island of Masbate, Philippines (found dead on the shore); Cuming.

A strongly-sculptured species, with the sutures less developed than usual, prettily sprinkled with ruddy rose.

16.

17.

18.

19.a.

20.a.

20.b.

19.b.

21.a.

21.b.

22.

Sowerby, del.et lith.

Vincent Brooks, Imp.

TORNATELLA.

PLATE IV.

Species 16. (Mus. Cuming.)

TORNATELLA NIPHONENSIS. *Torn. testâ ovato-turbinatâ, minutè umbilicatâ, transversim undique confertim lineari-sulcatâ, albâ, columellâ vix plicatâ.*

THE NIPHON TORNATELLA. Shell ovately turbinated, minutely umbilicated, transversely closely linearly-grooved throughout, white, columella scarcely plaited.

Leucotina Niphonensis, Adams, MS. in Mus. Cuming.

Hab. Niphon, Japan; A. Adams.

A very small, turbinated shell, closely spirally linearly grooved throughout.

Species 17. (Mus. Cuming.)

TORNATELLA PUNCTATO-STRIATA. *Torn. testâ suboblongo-ovatâ, transversim minutè lineariter punctato-striatâ, pellucido-albâ, spirâ exsertâ, columellâ tenui-plicatâ.*

THE PUNCTURED-STRIATED TORNATELLA. Shell rather oblong-ovate, transversely minutely linearly punctured-striated, transparent white, spire exserted, columella thinly plaited.

Acteon punctato-striata, C. B. Adams, MS. in Mus. Cuming.

Hab. New York Bay, United States (dredged from the depth of sixteen fathoms).

A small, semitransparent shell, with the spire rather exserted, and the surface finely spirally punctured-striated throughout.

Species 18. (Mus. Cuming.)

TORNATELLA ORYZA. *Torn. testâ ovatâ, solidiusculâ, transversim undique lineari-sulcatâ, eburneâ, columellâ subprominentè uniplicatâ.*

THE RICE-GRAIN TORNATELLA. Shell ovate, rather solid, transversely linearly grooved throughout, ivory-white, columella rather prominently one-plaited.

REEVE, Pro. Zool. Soc. 1842, p. 62.

Hab. Catbalonga, Island of Luzon, Philippines; Cuming.

Of more solid structure than the preceding species, partaking more of the typical character of the genus.

Species 19. (Fig. *a*, *b*, Mus. Cuming.)

TORNATELLA DIANÆ. *Torn. testâ ovato-turbinatâ, transversim undique confertim liratâ, opaco-albâ, spirâ conspicuè pyramidali-exsertâ, columellâ parum plicatâ.*

DIANA'S TORNATELLA. Shell ovately turbinated, transversely closely ridged throughout, opake white, spire conspicuously pyramidally exserted, columella but little plicated.

Leucotina Dianæ, Adams, MS. in Mus. Cuming.

Hab. Japan; Dr. Siebald.

It will be observed that this interesting shell is quite an abnormal form of *Tornatella*. The columella-plait is only very moderately developed.

Species 20. (Fig. *a*, *b*, Mus. Cuming.)

TORNATELLA MODESTA. *Torn. testâ pyramidali-turbinatâ, transversim undique tenuè lineari-sulcatâ, nitente-albâ, spirâ acutè acuminatâ, columellâ vix plicatâ, aperturâ parvâ.*

THE MODEST TORNATELLA. Shell pyramidally turbinated, transversely finely linearly grooved throughout, shining white, spire sharply acuminated, columella scarcely plaited, aperture small.

Acteon modesta, Adams, MS. in Mus. Cuming.

Hab. Island of Correjidor, Philippines (dredged from the depth of seven fathoms); Cuming.

Chiefly distinguished by its narrow, pyramidally turbinated form.

Species 21. (Fig. *a*, *b*, Mus. Cuming.)

TORNATELLA LYRATA. *Torn. testâ pyramidali-turbinatâ, transversim undique prominentè liratâ et sulcatâ, albâ, spirâ acutè acuminatâ, columellâ parum plicatâ, aperturâ parvâ.*

THE STRINGED TORNATELLA. Shell pyramidally turbinated, transversely prominently ridged and grooved throughout, white, spire sharply acuminated, columella but little plaited, aperture small.

Parthenia lyrata, Carpenter, MS. in Mus. Cuming.

Hab. Hongkong.

Closely resembling the preceding species in form, but the surface, instead of being finely linearly grooved, is closely strongly grooved and ridged.

Species 22. (Mus. Cuming.)

TORNATELLA MARIÆ. *Torn. testâ cylindraceo-ovatâ, transversim undique lineariter punctato-striatâ, semi-pellucido-albâ, griseo remotè bifasciatâ, spirâ parvâ, columellâ uniplicatâ.*

MARIA'S TORNATELLA. Shell cylindrically ovate, transversely linearly punctured-grooved throughout, semi-transparent white, distantly two-banded with grey, spire small, columella one-plaited.

Acteon Mariæ, Adams, MS. in Mus. Cuming.

A very finely grooved species, encircled with two distant dark-grey bands.

MONOGRAPH

OF THE GENUS

PYRAMIDELLA.

" Did not the great Creator's voice proclaim
  Whate'er he made, from the blue spangled frame,
  To the poor leaf that trembles, very good?"

Quarles.

1.

2.a.

2.b.

3.

4.a.

4.b.

5.

6.

7.

8.

Sowerby del et lith.

Vincent Brooks, Imp.

PYRAMIDELLA.

PLATE I.

Genus PYRAMIDELLA, Lamarck.

Testa subulato-turrita, multispirata, lævis vel longitudinaliter plicata, spirâ acutâ apice sinistro, aperturâ integrâ, anticè rotundâ, columellâ plicatâ, labro acuto; operculum corneum, ovatum, margine interno sinuato.

Shell subulately turreted, with many-whorled spire, smooth or longitudinally plicated, spire acute, with a sinistral apex, aperture entire, rounded in front, columella plaited, outer lip acute; operculum horny, oval, with the inner margin sinuous.

Of the 45 species now recorded in this interesting genus, 24 were described for the first time by Mr. Arthur Adams, in Mr. Sowerby's 'Thesaurus Conchyliorum,' 11 in the 'Annals' and 'Proceedings' recently, by the same author, and 3 by Mr. Gould; 8 only having been known to previous authors. While several of the earlier known forms, such as *P. dolabratus* and *P. terebellum*, are West Indian shells, many of those more recently discovered were contributed from the researches of the late lamented Mr. Cuming in the Philippine Islands. The islands of the Pacific have supplied several species, and the Japanese and Chinese seas have delivered their quota to the little collection.

In the monograph by Mr. Adams, the less pyramidal forms, which are also characterized by the shells being plicated, are alone placed under the generic title of *Pyramidella*, while the more tapering and smooth species are included under the term *Obeliscus*. The differences named, however, do not seem sufficiently decided to warrant the division of this small group of shells.

Species 1.

PYRAMIDELLA BRUNNEA. *Pyr. testâ elongato-subulatâ, lævigatâ, longitudinaliter leviter striatâ, brunneâ, anfractibus planatis, numerosis, ad suturam subcrenulatis, ultimo rotundato, suturâ profundâ, aperturâ ovali, anticè subeffusâ, columellâ rectâ, anticè subreflexâ, subexpansâ, posticè uniplicatâ, labro simplici.*

THE BROWN PYRAMIDELLA. Shell elongately subulate, smooth, longitudinally lightly striated, brown, whorls flattened, numerous, slightly crenulated at the suture, the last rounded, suture deep, aperture oval, rather expanded in front, columella straight, reflected in front, expanded, with a single plait placed backwards, outer lip simple.

A. ADAMS, Sowerby's Thes. Conch. Obeliscus sp. 20.

Hab. Japan; Dr. Siebold.

This brown, tapering smooth shell has slightly flattened whorls, deep suture, and only one plait on the columella.

Species 2. (Fig. *a*, *b*, Mus. Cuming.)

PYRAMIDELLA ELEGANS. *Pyr. testâ subulatâ, eleganter pyramidatâ, fulvâ, lævigatâ, lineâ rubrâ pallidâ cinctâ, anfractibus plano-subconcavis, ultimo angulato, suturâ profundâ, aperturâ subtrigonâ, columellâ tortuosâ, uniplicatâ, labro vix incrassato.*

THE ELEGANT PYRAMIDELLA. Shell subulate, elegantly tapering, yellowish-brown, smooth, girt with a pale-red line, whorls flattened, almost concave, the last angular, suture deep, aperture rather trigonal, columella tortuous, one-plaited, outer lip very slightly thickened.

A. ADAMS, Sowerby's Thes. Conch. Obeliscus sp. 14.

Hab. Singapore; Lieut. Taylor.

In this, as in some of the succeeding species, the angle of the whorls being formed above the suture, produces a deep depression or channel. The columella may be said almost to consist of one spiral plait.

Species 3. (Mus. Cuming.)

PYRAMIDELLA TURRITA. *Pyr. testâ pyramidatâ, turritâ, lævigatâ, pallidissimè fulvâ, anfractibus numerosis, planulatis, supra ad suturas albis, minutè crenulatis, infra ad suturam excavatis, ultimo rotundo, lineâ impressâ cincto, aperturâ angustâ, ad basin canaliferâ et subrostratâ, columellâ rectâ, triplicatâ, labro tenui.*

THE TURRETED PYRAMIDELLA. Shell tapering, turreted, smooth, very pale yellowish-brown, whorls numerous, flat, white and minutely crenulated above, excavated at the suture below, the last rounded, girt with an impressed line, aperture narrow, with a canal at the base, where it is slightly beaked, columella straight, with three folds, outer lip thin.

A. ADAMS, Sowerby's Thes. Conch. Obeliscus sp. 9.

Hab. Albrochos Island, North Australia (on stones, low water); J. E. Dring.

This shell closely resembles, in most characters, *P. teres*, sp. 6, but in that species the whorls are not crenulated at the sutures.

Species 4. (Fig. *a*, *b*, Mus. Cuming.)

PYRAMIDELLA TESSELLATA. *Pyr. testâ elongato-pyramidatâ, lævigatâ, pallidissimè fulvâ, anfractibus numerosis, maculis quadratis seriebus tribus cinctâ, ultimo infra subrotundo, suturâ excavatâ, aperturâ oblongâ, ad basin canaliferâ, columellâ rectâ, triplicatâ, labro subsinuato, tenui.*

THE TESSELLATED PYRAMIDELLA. Shell elongate, tapering, smooth, very pale-brown, whorls numerous, girt with three rows of rather square spots, last whorl rounded, suture impressed, aperture oblong, with a canal at the base, columella straight, three-plaited, outer lip rather sinuous, thin.

A. ADAMS, Sowerby's Thes. Conch. Obeliscus sp. 12.

Hab. Island of Masbate, Philippines (in sandy mud).

A much more slender shell than *P. punctatus*, sp. 5, with the last whorl and the canal much more produced. It is also very differently marked.

Species 5. (Mus. Cuming.)

PYRAMIDELLA PUNCTATA. *Pyr. testâ elongato-pyramidatâ, longitudinaliter striatâ, lævigatâ, albidâ, griseo subulatâ, maculis rufo-nigrescentibus magnis sparsim et irregulariter, atque alteris parvis subquadratis, inæqualibus seriatim pictâ, anfractibus numerosis, subrotundis, ultimo breviusculo in varice desinente, suturâ excavatâ, aperturâ subpyriformi, columellâ triplicatâ, labro incrassato, ad basin subemarginato.*

THE SPOTTED PYRAMIDELLA. Shell elongate, tapering, longitudinally striated, smooth, nearly white, clouded with grey, ornamented with a few large blackish-red spots irregularly placed, and others smaller, rather square, arranged in rows, whorls numerous, rather round, the last rather short, terminating in a varix, suture excavated, aperture pyriform, columella three-plaited, outer lip thickened, emarginated at the base.

CHEMNITZ, Conch. pl. 4. f. 1493, 1494.

Pyramidella maculosa, Lam.

Platia guttata, Link.

Hab. Moluccas.

A large solid species, finely clouded and spotted.

Species 6. (Mus. Cuming.)

PYRAMIDELLA TERES. *Pyr. testâ elongato-pyramidatâ, albâ, anfractibus numerosis, subplanulatis, lineâ pallidâ rufâ spirali et fasciis undulatis longitudinalibus cinctis, suturâ excavatâ, ultimo anfractu lineâ impressâ cinctâ, aperturâ ovali, anticè in canalem brevem productâ, columellâ arcuatâ, triplicatâ.*

THE PILLAR PYRAMIDELLA. Shell elongate, tapering, white, whorls numerous, rather flat, girt with a pale-reddish spiral line and undulating longitudinal bands, suture excavated, last whorl with an impressed line, aperture oval, anteriorly produced into a short canal, columella arched, three-plaited.

A. ADAMS, Sowerby's Thes. Conch. Obeliscus sp. 10.

Hab. Island of Panay (on the beach); Cuming.

A shell of numerous whorls and very elongate form.

Species 7. (Fig. *a*, *b*, Mus. Cuming.)

PYRAMIDELLA MONILIS. *Pyr. testâ subventricosâ, pyramidatâ, longitudinaliter minutissimè striatâ, albâ, lævigatâ, maculis fuscis pallidis in seriebus tribus pictâ, anfractibus subventricosis, ultimo inflato, rotundato, in varice desinente, aperturâ pyriformi, columellâ triplicatâ, plicâ posticâ maximâ, labro subexpanso, ad basin emarginato.*

THE BEADED PYRAMIDELLA. Shell rather ventricose, tapering, very finely longitudinally striated, white, smooth, painted with small brown spots in three rows, whorls rather ventricose, the last inflated, rounded, ending in a varix, aperture pyriform, columella with three plaits, the hinder one very large, outer lip slightly expanded, emarginated at the base.

A. ADAMS, Sowerby's Thes. Conch. Obeliscus sp. 5.

Hab. Island of Negros, Philippines (seven fathoms, coarse sand); Cuming.

A lighter and narrower shell than *P. sulcata*, although more ventricose than *P. teres*.

Species 8. (Mus. Cuming.)

PYRAMIDELLA TEREBELLOIDES. *Pyr. testâ subulatâ, pyramidatâ, angustiusculâ, tenui, nitidâ, albâ, spiraliter lineis rubris tribus ornatâ, anfractibus subrotundis, suturâ impressâ, aperturâ oblongâ, anticè subproductâ, columellâ recurvâ, biplicatâ.*

THE AUGER-LIKE PYRAMIDELLA. Shell subulate, pyramidal, rather narrow, thin, smooth, white, ornamented with three spiral red lines, whorls slightly rounded, suture impressed, aperture oblong, rather produced in front, columella recurved, with two plaits.

A. ADAMS, Sowerby's Thes. Conch. Obeliscus sp. 11.

Hab. ——?

Much narrower than *P. terebellum*, and having only two plaits on the columella.

9.

10.

11.

12.a.

13.a.

13.b.

12.b.

14.

15.

16.

Sowerby, del et lith.

Vincent Brooks, Imp

PYRAMIDELLA.

PLATE II.

Species 9. (Mus. Cuming.)

PYRAMIDELLA CINCTA. *Pyr. testâ subovali-acuminatâ, albâ, anfractibus lævibus, zonâ fuscâ latâ distinctâ in medio cinctis, aperturâ subpyriformi, labro simplici, acuto.*

THE BELTED PYRAMIDELLA. Shell rather oval, but acuminated, white, with smooth whorls, girt in the middle with a broad, defined, chestnut band, aperture rather pyriform, outer lip simple, thin.

REEVE, Pro. Zool. Soc. 1842. Adams, in Sowerby's Thes. Conch. Obeliscus sp. 6.

Hab. Island of Ticao, Philippines (in sandy mud, at the depth of seven fathoms); Cuming.

More oval in form than most of the other species.

Species 10. (Mus. Cuming.)

PYRAMIDELLA PERFORATA. *Pyr. testâ conicâ, brevi, latè et profundè umbilicatâ, albâ, lævissimâ, anfractibus vix rotundatis, ultimo obtusè angulato, lineâ pallidissimâ rufâ in medio ornatis, suturâ profundâ, aperturâ parvâ, subquadratâ, columellâ rectâ, plicis tribus, quarum unâ superiore maximâ.*

THE PERFORATED PYRAMIDELLA. Shell conical, short, widely and deeply umbilicated, white, very smooth, whorls rather flat, the last obtusely angulated, girt with an extremely pale reddish line, suture deep, aperture small, rather square, columella straight, with three plaits, the upper one of which is the largest.

A. ADAMS, in Sowerby's Thes. Conch. Obeliscus sp. 19. f. 9.

Hab. St. John's, West Indies (on the sands); Dr. Hornbeck.

Of a widely conical form, and more deeply perforated than other species of the group to which it belongs.

Species 11. (Mus. Cuming.)

PYRAMIDELLA FASTIGIUM. *Pyr. testâ ovali-subconicâ, subventricosâ, perforatâ, albâ, nitidissimâ, lævi, anfractibus planiusculis, ultimo vix angulato, columellâ rectâ, triplicatâ, labro intus lirato.*

THE POINTED-ROOF PYRAMIDELLA. Shell ovately subconical, subventricose, perforated, white, very smooth and shining, whorls rather flat, the last scarcely angulated, columella straight, with three plaits, outer lip with slightly raised internal ridges.

A. ADAMS, in Sowerby's Thes. Conch. Obeliscus sp. 18. f. 8.

Hab. Loay, Island of Bohol, Philippines (in sandy mud, sixteen fathoms); Cuming.

This white shell differs from the preceding in the greater rotundity of the last whorl and the narrowness of the perforation.

Species 12. (Fig. *a*, *b*, Mus. Cuming.)

PYRAMIDELLA SULCATA. *Pyr. testâ subulato-turritâ, longitudinaliter striis sinuatis leviter sulcatâ, albidâ, maculis longitudinalibus cæruleis nebulatâ, maculis parvis seriatim pictâ, anfractibus quadrato-subrotundatis, ultimo ventricoso, aperturâ ovali, anticè subquadratâ, et canaliculatâ, columellâ subarcuatâ, triplicatâ.*

THE GROOVED PYRAMIDELLA. Shell subulately turreted, longitudinally grooved with sinuous striæ, rather white, clouded with longitudinal bluish spots and painted with rows of small brown spots, whorls subquadrately rounded, the last ventricose, aperture oval, subquadrate and canaliculated at the base, columella rather arched, triplicate.

A. ADAMS (Nuttall MS.), in Sowerby's Thes. Conch. Obeliscus sp. 8.

Hab. Tahiti (coral sand); Cuming.

Species 13. (Fig. *a*, *b*, Mus. Cuming.)

PYRAMIDELLA DOLABRATA. *Pyr. testâ politâ, perforatâ, ventricosâ, conico-turritâ, albâ, lineis luteis et castaneis cinctâ, aperturâ pyriformi, columellâ recurvâ, repandâ, labro tenui, simplici.*

THE AXE PYRAMIDELLA. Shell polished, perforated, ventricose, conically turreted, white, with yellowish and chestnut transverse lines, aperture pyriform, columella recurved and expanded, outer lip thin, simple.

LINNÆUS, Syst. Nat. (Trochus).

Pyramidella terebellum, Brug.

Hab. Loanda, West Africa; Dr. Sams.

This is a rather thick shell, with ventricose whorls.

Species 14. (Mus. Cuming.)

PYRAMIDELLA TEREBELLUM. *Pyr. testâ eleganter pyramidatâ, perforatâ, lævissimâ, tenui, subcæruleâ seu albâ, anfractibus planulatis, lineis nigrescentibus cinctâ, aperturâ pyriformi, columellâ recurvâ, repandâ, labro tenui, subsinuato, simplice.*

THE LITTLE AUGER PYRAMIDELLA. Shell elegantly pyramidal, perforated, very smooth, thin, bluish or white, whorls rather flat, girt with nearly black lines, aperture pyriform, columella recurved, expanded, outer lip thin, rather sinuous, simple.

OBELISCUS TEREBELLUM, Müller.

Trochus dolabratus, var., Gmel.

Hab. West Indian Islands (Mus. Cuming).

Thinner and less ventricose than *P. dolabrata*, with the whorls considerably more flattened.

Species 15. (Mus. Cuming.)

PYRAMIDELLA VENTRICOSA. *Pyr. testâ ovato-acuminatâ, lævi, albâ, fusco-nigrescente maculatâ, griseo flammulatâ, anfractibus subplanulatis, ad suturam angulatis, umbilico parvo, varice circumscripto, labro lævigato intus incrassato, columellâ subarcuatâ, triplicatâ, plicâ unâ superiore maximâ.*

THE VENTRICOSE PYRAMIDELLA. Shell ovately acuminated, smooth, white, spotted with blackish-brown with small flames of grey, whorls rather flattened, with an angle at the suture, umbilicus small, circumscribed by a varix, outer lip smooth, thickened within, columella rather arched, with three plaits, the upper plait very large.

GUERIN, Mag. de Zoologie.

Hab. Island of Ticao, Philippines; Cuming.

Of the same form as *P. cinctus*, but thicker and more ventricose, with very different markings.

Species 16. (Mus. Cuming.)

PYRAMIDELLA SCITULA. *Pyr. testâ subovali, perforatâ, albâ, spirâ acutâ, anfractibus convexiusculis, ad suturam angulatis, longitudinaliter et transversim striatis, fasciis fuscis spiralibus et flammulis longitudinalibus ornatis, aperturâ subovali, umbilico varice circumscripto, labro simplici.*

THE NEAT PYRAMIDELLA. Shell rather oval, perforate, white, spire acute, whorls convex, angulated at the suture, striated in both directions, ornamented with brown spiral bands and flame-like longitudinal markings, aperture rather oval, umbilicus circumscribed by a varix, outer lip simple.

A. ADAMS, in Sowerby's Thes. Conch. Obeliscus sp. 21.

Hab. Island of Masbate (in sandy mud, at a depth of ten fathoms); Cuming.

There is no very tangible character to distinguish this from *P. ventricosus*, but it is a less ventricose shell and differently coloured.

18.a.

17.

18.b.

19.

20.a.

20.b.

21.

22.a.

22.b.

23.

PYRAMIDELLA.

PLATE III.

Species 17. (Mus. Cuming.)

PYRAMIDELLA NITIDA. *Pyr. testâ ovatâ, nitidâ, albâ, longitudinaliter costellatâ, costellis latis, rectis, planulatis, lævibus, interstitiis subdistantibus, punctatis, anfractu ultimo subelongato, aperturâ obliquâ, parvâ, columellâ plicis tribus fere æqualibus instructâ.*

THE SHINING PYRAMIDELLA. Shell oval, shining, white, longitudinally ribbed, the ribs straight, wide, flattened, smooth, interstices rather distant, punctured, last whorl elongated, aperture oblique, small, columella with three nearly equal teeth.

A. ADAMS, in Sowerby's Thes. Conch. Pyr. 9. pl. 172. f. 11.

Hab. Philippines; Cuming.

In this pretty little shell the ribs are broad and flat, with narrow punctured interstices.

Species 18. (Mus. Cuming.)

PYRAMIDELLA GLANS. *Pyr. testâ ovali, ventricosâ, brevi, obtusâ, albâ, fasciâ fuscâ, ad dorsum repandâ et lineâ suturali pictâ, longitudinaliter costellatâ, inter costellas spiraliter liratâ, aperturâ obliquâ, labro crasso simplici.*

THE ACORN PYRAMIDELLA. Shell oval, ventricose, short, obtuse, white, with a broad brown band at the lower part of the whorls and a narrow band at the suture, longitudinally ribbed, between the ribs spirally lirated, aperture oblique, outer lip thick, simple.

REEVE, Pro. Zool. Soc. 1842.

Hab. Island of Masbate, Philippines; Cuming.

The costellæ are not flattened, as in *P. nitida*, but distant and prominent.

Species 19. (Mus. Cuming.)

PYRAMIDELLA NODOCINCTA. *Pyr. testâ conico-subovatâ, albâ, maculis rufis in seriebus transversis dispositis, anfractibus circa decem, supra angulatis, plicis in nodulis angulatis productis distanter ornatis, infra minutè foveolatis, aperturâ elongatâ, pyriformi, columellâ reflexâ, incrassatâ, labro crasso, posticè subemarginato.*

THE NODULOUS PYRAMIDELLA. Shell conically subovate, white, with reddish spots in transverse rows, about ten whorls angulated above, with plaits produced into angular nodules at the angles below, minutely pitted, aperture lengthened, pyriform, columella thickened and reflected backwards, outer lip thick, emarginate posteriorly.

A. ADAMS, in Sowerby's Thes. Conch. Pyramidella sp. 6.

Hab. Philippines; Cuming.

The lower part of the whorls is curiously punctured with little round pits, forming the surface into a sort of network between them, while the upper angle is ornamented by pliciform nodules produced into angles.

Species 20. (Fig. *a*, *b*, Mus. Cuming.)

PYRAMIDELLA MITRALIS. *Pyr. testâ ovali-elongatâ, albâ, infra pallidè rufo-fasciatâ, anfractibus convexiusculis, costellatis, ad suturam angulatis, costellis rotundis, rectis, angustis, subdistantibus, lævibus, interstitiis spiraliter liratis, anfractu ultimo arcuatim producto, aperturâ obliquè pyriformi, anticè subcanaliculatâ, columellâ crassâ, labro extus incrassato.*

THE MITRE PYRAMIDELLA. Shell elongately oval, white, lightly banded with reddish-brown beneath, whorls rather convex, ribbed, angulated at the suture, ribs rounded, straight, narrow, rather distant, smooth, interstices spirally ridged, last whorl bent forwards and produced, aperture obliquely pyriform, subcanaliculated in front, columella thick, outer lip thickened without.

A. ADAMS, in Sowerby's Thes. Conch. Pyramidella sp. 9.

Hab. Island of Luzon, Philippines (sand at low water); Cuming.

A very mitriform species, in which the ribs, especially in the lower whorls, are rather distant and the interstices spirally ribbed.

Species 21. (Mus. Cuming.)

PYRAMIDELLA AURIS-CATI. *Pyr. testâ ovatâ, longitudinaliter costatâ, albâ, maculis arcuatis fuscis grisescentibus seriatim cinctâ, costis lævibus, rectis, prope suturam nodulosis, interstitiis spiraliter striatis, au-*

fractu ultimo subelongato, anticè producto, aperturâ elongatâ, obliquè pyriformi.

The cat's-ear Pyramidella. Shell ovate, longitudinally ribbed, white, girt with rows of greyish-brown spots, ribs smooth, straight, thickened into nodules at the suture, interstices spirally striated, last whorl rather long, bent forwards, aperture long, obliquely pyriform.

Chemnitz, Conch. Voluta t. 11. p. 20. pl. 117. f. 1711, 1712.

Voluta spiralis, Wood.

Pyramidella plicata, Lamarck; Kiener.

Hab. Island of Vanikoro, Philippines; Cuming.

The ribs of this species are continuous, smooth, and distant; the nodules at the angle are not very conspicuous. It is the most regularly formed shell of the group to which it belongs.

Species 22. (Fig. *a*, *b*, Mus. Cuming.)

Pyramidella propinqua. *Pyr. testâ ovatâ, brevi, ad spiram acuminatâ, albâ, fusco-grisescente variegatâ, costis lævibus, rectis, prope suturam vix nodulosis, infra subevanidis, subduplicatis, interstitiis spiraliter striatis, aperturâ brevi, obliquè pyriformi, labro incrassato.*

The approximate Pyramidella. Shell oval, short, acuminated at the spire, white, variegated with greyish-brown, ribs smooth, straight, near the suture very slightly nodulous, tending to divide and disappear beneath, interstices spirally striated, aperture short, obliquely pyriform, outer lip thick.

A. Adams, Sowerby's Thes. Conch. Pyramidella sp. 6.

Hab. Rheetea, Society Islands (on the reefs); Cuming.

More short and oval in form than *P. auris-cati*, the nodules scarcely distinct, and a tendency in the ribs to divide and sink towards the lower part of the whorls.

Species 23. (Mus. Cuming.)

Pyramidella variegata. *Pyr. testâ ovali-oblongâ, albâ, fusco-grisescente variegatâ, costis crebris, lævibus, rectis, infra subevanidis, subduplicatis, interstitiis spiraliter striatis, aperturâ brevi, obliquè pyriformi, labro incrassato.*

The variegated Pyramidella. Shell oval-oblong, white, variegated with greyish-brown, ribs rather close, smooth, straight, rather thinning and dividing beneath, interstices spirally striated, aperture short, obliquely pyriform, outer lip thick.

A. Adams, Sowerby's Thes. Conch. Pyramidella sp. 8.

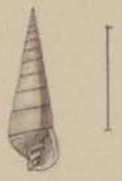
Island of Masbate, Philippines (seven fathoms deep, in sandy mud); Cuming.

Much more narrow and lengthened than *P. propinqua*. It is marbled in the same way, but the ribs are closer.

24.

25.a.

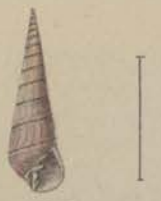
25.b.



26.a.

27.a.

27.b.



26.b.

28.a.

28.b.

29.

PYRAMIDELLA.

PLATE IV.

Species 24. (Mus. Cuming.)

PYRAMIDELLA PULCHELLA. *Pyr. testâ subulatâ, acuminatâ, lævigatâ, nitidâ, albâ, anfractibus circa decem, planulatis, lineâ rubrâ in medio et alterâ infra cinctis, suturâ lineari, ultimo anfractu subangulato, aperturâ subovali, columellâ rectâ, labro tenui, simplici.*

THE BEAUTIFUL PYRAMIDELLA. Shell subulate, acuminate, smooth, shining, white, whorls about ten, flat, with a red line at the suture, showing in the centre of the last whorl, and another at the base, last whorl slightly angular, aperture rather oval, columella straight, outer lip thin, simple.

A. ADAMS, Sowerby's Thes. Conch. Obeliscus sp. 13.

Hab. Japan; Cuming.

A beautifully-polished, pyramidal species, with a neat red line at the centre or suture of the whorls.

Species 25. (Fig, *a*, *b*, Mus. Cuming.)

PYRAMIDELLA ACLIS. *Pyr. testâ elongato-subulatâ, acuminatâ, fulvo-aurantiacâ, nitidâ, anfractibus circa tredecim, planis, suturâ profundâ, aperturâ parvâ, obliquâ, oblongâ, columellâ reflexâ, uniplicatâ, labro tenui.*

THE DART PYRAMIDELLA. Shell elongately subulate, acuminate, orange-brown, shining, whorls about thirteen, flat, with deep suture, aperture small, oblique, oblong, columella reflected, with one strong plait, outer lip thin.

A. ADAMS, Sowerby's Thes. Conch. Obeliscus sp. 26.

Hab. Loay, Island of Bohol, Philippines; Cuming.

A long, narrow, uniformly-coloured species, with numerous whorls divided by a deep suture.

Species 26. (Fig. *a*, *b*, Mus. Cuming.)

PYRAMIDELLA HASTATA. *Pyr. testâ subulatâ, acuminatâ, lævigatâ, nitidâ, pallidè fulvâ, seu albâ, longitudinaliter leviter striatâ, anfractibus circa tredecim, planulatis, ad suturas creberrimè crenulatis, suturâ profundâ, anfractu ultimo subangulato, medio sulcato, aperturâ subangulatâ, columellâ rectâ, brevi, triplicatâ, umbilico parvo, varice spirali circumscripto, labro tenui.*

THE SPEAR PYRAMIDELLA. Shell subulate, sharp-pointed, smooth, shining, white or pale-brown, longitudinally lightly striated, whorls about thirteen, minutely crenulated at the suture, suture deep, last whorl slightly angular, with a groove in the centre, columella straight, short, triplicate, a small umbilicus defined by a spiral varix, outer lip thin.

A. ADAMS, Sowerby's Thes. Conch. Obeliscus sp. 24.

Hab. ——?

A groove in the centre of the whorls, which are minutely crenulated on their upper edges, and forming a deep suture, distinguishes this elegant species from others similarly shaped.

Species 27. (Fig. *a*, *b*, Mus. Cuming.)

PYRAMIDELLA ACICULATA. *Pyr. testâ elongato-subulatâ, acuminatâ, nitente, pallidè fulvâ, anfractibus numerosis, subventricosis, suturâ profundâ, anfractu ultimo rotundato, aperturâ ovali, parvâ, columellâ subreflexâ, uniplicatâ, labro tenui.*

THE POINTED PYRAMIDELLA. Shell elongate, subulate, sharp, shining, pale-fulvous, whorls numerous, rather ventricose, suture deep, last whorl rounded, aperture oval, small, columella reflected, with one strong plait, outer lip thin.

A. ADAMS, Sowerby's Thes. Conch. Obeliscus sp. 15.

Hab. Island of Mindoro, Philippines; Cuming.

Differing from *P. aclis* in the deeply-impressed suture and in the shape of the whorls, which, although slightly ventricose, are yet slightly compressed in the centre.

Species 28. (Fig. *a*, *b*, Mus. Cuming.)

PYRAMIDELLA ATTENUATA. *Pyr. testâ angustâ, subulatâ, vix umbilicatâ, albidâ, tenui, spiraliter minutissimè striatâ, anfractibus planis, suturâ profundâ, apice papilloso, aperturâ parvâ, columellâ reflexâ, uniplicatâ, labro tenui.*

THE ATTENUATED PYRAMIDELLA. Shell narrow, subulate, scarcely umbilicated, whitish, thin, spirally very minutely striated, whorls flat, suture impressed, apex papillary, aperture small, columella reflected, uniplicate, outer lip thin.

A. ADAMS, Sowerby's Thes. Conch. Obeliscus sp. 23.

Hab. Island of Bohol, Philippines (under stones at low water); Cuming.

The striation is so light and minute as to escape observation unless the lens be used, but the flattened whorls and impressed suture serve to distinguish this nearly white thin shell. It has a rounded or papillary spire.

Species 29. (Mus. Cuming.)

PYRAMIDELLA ACHATES. *Pyr. testâ oblongo-subcylindraceâ, lævi, obtusâ, pallidè fulvâ, anfractibus circa octo, planulatis, ad suturam subelevatis, medio prope suturam lineâ impressâ cinctis, supra fasciâ albâ, medio et infra flammulis fuscis seriatim variegatis, suturâ profundâ, aperturâ oblongâ, columellâ subrectâ, triplicatâ, labro anticè vix expanso.*

THE AGATE PYRAMIDELLA. Shell oblong-cylindrical, smooth, obtuse, pale-brown, whorls about eight, flat, slightly raised at the suture, girt with an impressed line in the centre near the suture, variegated with a white band above, and rows of flame-like markings of brown in the centre and below, aperture oblong, columella nearly straight, triplicate, outer lip slightly expanded in front.

GOULD.

Cerithium clavulus, A. Adams, Sowerby's Thes. Conch. sp. 25.

Hab. Acapulco (on the sands); Col. Moffatt.

A beautifully-painted Pupiform species.

34.a.

30. a.

31. b.

32.

33.a.

33.b.

34.

35.a.

35. b.

30.b.

PYRAMIDELLA.

PLATE V.

Species 30. (Fig. *a*, *b*, Mus. Cuming.)

PYRAMIDELLA ORNATA. *Pyr. testâ elongato-cylindraceâ, nitidâ, pallidâ, anfractibus numerosis subventricosis, medio prope suturam lineâ rubrâ angustâ cinctis, aperturâ subovali, columellâ uniplicatâ, tenui, leviter reflexâ, labro tenui.*

THE ORNATE PYRAMIDELLA. Shell long, cylindrical, smooth, pale, whorls numerous, rather ventricose, girt with a narrow red line in the centre near the suture, aperture rather oval, columella with one plait, thin, slightly reflected, outer lip thin.

GOULD.

Obeliscus columella, A. Adams.

Hab. Coral Sea.

Species 31. (Fig. *a*, *b*, Mus. Cuming.)

PYRAMIDELLA PUSILLUS. *Pyr. testâ parvâ, obtusè conicâ, albâ, nitidâ, anfractibus planiusculis, suturis profundis, anfractu ultimo vix angulato, aperturâ subpyriformi, columellâ biplicatâ, labro intus lirato.*

THE LITTLE PYRAMIDELLA. Shell small, obtusely conical, white, smooth, whorls rather flat, suture deep, last whorl scarcely angulated, aperture rather pyriform, columella with two plaits, outer lip internally ribbed.

A. ADAMS, Sowerby's Thes. Conch. Obeliscus sp. 16.

Hab. Island of Luzon; Cuming. Japan; A. Adams.

In general appearance this little white shell resembles *P. nitidula*, but the plaits inside the inner lip distinguish it sufficiently.

Species 32. (Mus. Cuming.)

PYRAMIDELLA STRIATULA. *Pyr. testâ turritâ, subulatâ, albâ, tenui, subpellucidâ, spiraliter tenuissimè striatâ, anfractibus octo, subventricosis, suturâ profundâ, aperturâ oblongâ, columellâ posticè uniplicatâ, labro tenui, intus lirato.*

THE LITTLE-STRIATED PYRAMIDELLA. Shell turreted, subulate, white, thin, almost transparent, spirally very finely striated, whorls eight, slightly ventricose, suture deep, aperture oblong, columella with a single posterior plait, outer lip thin, lirated within.

A. ADAMS, Sowerby's Thes. Conch. Obeliscus sp. 28.

Hab. Feejee Islands.

This small white species is very finely striated, and of a very thin and semitransparent texture.

Species 33. (Fig. *a*, *b*, Mus. Cuming.)

PYRAMIDELLA BALTEATA. *Pyr. testâ parvâ, conicâ, acuminatâ, vix perforatâ, albidâ, nitidâ, fasciâ rubrâ pallidâ cinctâ, anfractibus complanatis, suturâ profundè impressâ, anfractu ultimo subangulato, aperturâ ovatâ, columellâ tenui, reflexâ, biplicatâ, labro tenui intus lirato.*

THE BELTED PYRAMIDELLA. Shell small, conical, acuminated, scarcely perforated, whitish, smooth, girt with a pale red line, whorls flattened, suture deeply impressed, last whorl rather angular, aperture ovate, columella thin, reflected, with two plaits, outer lip thin-ribbed within.

A. ADAMS, Sowerby's Thes. Conch. Obeliscus sp. 17.

Hab. Island of Mindinao (twenty fathoms, sandy mud); Cuming.

Species 34. (Mus. Cuming.)

PYRAMIDELLA CHEMNITZIANA. *Pyr. testâ elongatâ, medio vix inflatâ, albâ, lævigatâ, anfractibus numerosis, subplanulatis, ad suturam angulatis, aperturâ parvâ, columellâ biplicatâ, labro tenui.*

CHEMNITZ'S PYRAMIDELLA. Shell elongate, very slightly swelled in the centre, white, smooth, whorls numerous, rather flattened, angular at the suture, aperture small, columella with two plaits, outer lip thin.

A. ADAMS.

Hab. Feejee Islands.

A very lengthened species, with slightly flattened whorls.

Species 35. (Fig. *a*, *b*, Mus. Cuming.)

PYRAMIDELLA NITIDULA. *Pyr. testâ parvâ, albâ, sub-*

ovali, lævigatâ, anfractibus paucis, subplanulatis, suturâ impressâ, anfractu ultimo ovali, aperturâ parvâ, ovatâ, columellâ biplicatâ, labro tenui.

The neat little Pyramidella. Shell small, white, rather oval, smooth, whorls few, rather flat, suture impressed, last whorl rather oval, aperture small, oval, columella with two plaits, outer lip thin.

A. Adams, Ann. and Mag. Nat. Hist. 1860.
Hab. Japan.

Differing from *P. pusilla* in the absence of internal plaits.

36.

37

38.

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43.

44.

45.

Sowerby, del.et lith.

Vincent Brooks, Imp.

PYRAMIDELLA.

PLATE VI.

Species 36. (Mus. Cuming.)

PYRAMIDELLA CROCATA. *Pyr. testâ solidâ, parvâ, fulvâ, lævigatâ, elongato-conicâ, anfractibus planiusculis, suturâ impressâ, ultimo anfractu rotundato, aperturâ brevi, columellâ uniplicatâ, labro simplice.*

THE YELLOW PYRAMIDELLA. Shell solid, small, yellowish-brown, smooth, conical, long, whorls rather flat, suture impressed, last whorl rounded, aperture short, columella single-plaited, outer lip simple.

A. ADAMS.

Hab. Japan.

A very smooth pyramidal species, with one plait on the columella.

Species 37. (Mus. Cuming.)

PYRAMIDELLA CYLINDRELLA. *Pyr. testâ elongato-cylindraceâ, albâ, lineâ rubrâ tenui anfractuum medio cinctâ, anfractibus numerosis, planulatis, prope suturam subtumidis, suturâ profundâ, aperturâ parvâ, columellâ uniplicatâ, labro simplici.*

THE CYLINDER PYRAMIDELLA. Shell elongately cylindrical, white, girt with a thin red line in the middle of the whorls, whorls numerous, rather flat, a little swelled near the suture, suture impressed, aperture small, columella single-plaited, outer lip simple.

A. ADAMS (Syrnola).

Hab. Japan.

The most decided characters of this little shell are its elongate-cylindrical form and the thin red line round the centre of the whorls.

Species 38. (Mus. Cuming.)

PYRAMIDELLA SUBULINA. *Pyr. testâ pyramido-subulatâ, lævi, albâ, lineâ rubrâ tenui anfractuum medio cinctâ, anfractibus numerosis, subventricosis, aperturâ obliquâ, columellâ uniplicatâ, labro tenui, anticè subexpanso.*

THE LITTLE-AWL PYRAMIDELLA. Shell pyramidal, tapering to a point, smooth, white, girt with a thin red line in the centre of the whorls, whorls numerous, rather ventricose, aperture oblique, columella single-plaited, outer lip thin, rather expanded in front.

A. ADAMS, Pro. Zool. Soc. 1862, p. 234.

Hab. Takano Simo, Japan.

More tapering and less cylindrical in form than *P. cylindrella*, and having the whorls slightly swelled.

Species 39. (Mus. Cuming.)

PYRAMIDELLA DENTICULATA. *Pyr. testâ solidâ, elongato-pyramidatâ, albâ, lævi, anfractibus numerosis, supernè ad suturam minutè denticulatis, lateribus planulatis, suturâ profundâ, anfractu ultimo medio subangulato, infra angulum subrotundo, aperturâ subquadratâ, columellâ uniplicatâ, labro crasso, simplici.*

THE TOOTHED PYRAMIDELLA. Shell solid, elongately pyramidal, white, smooth, whorls numerous, their upper edge at the suture minutely denticulated, sides rather flat, suture deep, last whorl slightly angular in the centre, rounded beneath the angle, aperture subquadrate, columella one-plaited, outer lip thick, simple.

SOWERBY.

Syrnola aciculata, A. Adams.

Another species having been previously described under the name *P. aciculata*, it becomes necessary to give a new name to this one.

Species 40. (Mus. Cuming.)

PYRAMIDELLA PUPINA. *Pyr. testâ oblongâ, lævigatâ, albâ, spiraliter pallidè lineatâ, anfractibus novem, rectiusculis, medio subcompressis, suturâ impressâ, aperturâ oblongâ, anticè paululum expanso, columellâ elongatâ, rectiusculâ, uniplicatâ, labro tenui subsinuoso.*

THE CHRYSALIS PYRAMIDELLA. Shell oblong, smooth, white, spirally and faintly lineated, whorls nine, rather straight, rather compressed in the centre, suture impressed, aperture oblong, a little expanded in front, columella long, rather straight, with a single plait, outer lip thin, slightly sinuous.

A. ADAMS, Ann. and Mag. Nat. Hist. 1860.

Hab. Mino Sima, Japan.

This little species is wider in proportion to its length than Nos. 37 and 38. It is of a pyramidal form, and distinguished by a long, straight columella, with a plait high up under the body-whorl.

Species 41. (Mus. Cuming.)

PYRAMIDELLA MODICA. *Pyr. testâ angustâ, cylindraceâ, obtusâ, albâ, pallidè fasciatâ, supra suturam rubro unilineatâ, anfractibus novem, suturâ impressâ, aperturâ parvâ, subexpansâ, columellâ arcuatâ, uniplicatâ.*

THE LITTLE PYRAMIDELLA. Shell narrow, cylindrical, obtuse, white, with pale bands and one red line above the suture, whorls nine, suture impressed, aperture small, slightly expanded, columella arched, with one plait.

A. ADAMS, Pro. Zool. Soc. 1862.

Hab. Japan.

Species 42. (Mus. Cuming.)

PYRAMIDELLA FULVA. *Pyr. testâ solidâ, elongatâ, fulvâ, anfractibus quindecim, ventricosis, medio planulatis, aperturâ brevi, intus liratâ, columellâ rectiusculâ, medio uniplicatâ.*

THE BROWN PYRAMIDELLA. Shell solid, long, yellowish-brown, whorls fifteen, ventricose, flattened in the centre, aperture short, ribbed within, columella rather straight, with a single plait in the centre.

SOWERBY.

Syrnola brunnea, A. Adams.

Hab. Japan.

A very plain, long, brown species, with numerous whorls. The change in specific nomenclature has been rendered necessary by the previous use of the one applied by Mr. Adams. See our first species.

Species 43. (Mus. Cuming.)

PYRAMIDELLA SEROTINA. *Pyr. testâ parvâ, angustâ, subcylindraceâ, albâ, prope suturam et medio ultimi anfractus lineâ rubrâ cinctâ, anfractibus septem, ultimo oblongo, aperturâ ovali, columellâ arcuatâ, posticè uniplicatâ, labro tenui, simplice.*

THE WREATHED PYRAMIDELLA. Shell small, narrow, subcylindrical, white, girt with a red line near the suture and at the middle of the last whorl, whorls seven, the last oblong, aperture oval, columella arched, with a single plait far back, outer lip thin, simple.

A. ADAMS, Pro. Zool. Soc. 1862, p. 234.

Hab. Japan.

This shell nearly resembles *P. subulina*, sp. 38, but it is narrower and more cylindrical in shape. The last whorl is longer in proportion to the spire.

Species 44. (Mus. Cuming.)

PYRAMIDELLA GRACILLIMA. *Pyr. testâ albâ, parvâ, pyramidatâ, acuminatâ, lævigatâ, anfractibus planatis, ultimo subangulato, aperturâ subtrigonâ, columellâ arcuatâ, medio uniplicatâ, labro subeffuso.*

THE TAPERING PYRAMIDELLA. Shell white, small, pyramidal, acuminated, whorls flat, last whorl rather angular, aperture rather trigonal, columella arched, with one plait in the middle, outer lip rather effuse.

A. ADAMS, Pro. Zool. Soc. 1862, p. 133.

Hab. Japan.

This little white species is delicately tapering in form.

Species 45. (Mus. Cuming.)

PYRAMIDELLA CINCTELLA. *Pyr. testâ elongatâ, lævigatâ, albâ, lineâ rubrâ cinctâ, anfractibus novem, paulo inflatis, ultimo subovali, aperturâ ovali, columellâ arcuatâ, posticè uniplicatâ, labro tenui, simplice.*

THE LITTLE-BELTED PYRAMIDELLA. Shell elongate, smooth, white, girt with a red line, whorls nine, a little swelled, the last rather oval, aperture oval, columella arched, with a single plait placed backwards, outer lip thin.

A. ADAMS, Pro. Zool. Soc. 1862, p. 231.

Hab. Japan.

In form rather resembling some of the larger species of *Eulimella*.

PYRAMIDELLA.

	Plate.	Species.
achates, *Gould*	IV.	29
aciculata, *A. Adams*	IV.	27
aciculata, A. Adams	VI.	39
aclis, *A. Adams*	IV.	25
attenuata, *A. Adams*	IV.	28
auris-cati, *Chemnitz*	III.	21
balteata, *A. Adams*	V.	33
brunnea, *A. Adams*	I.	1
brunnea, A. Adams	VI.	42
Chemnitziana, *A. Adams*	V.	34
cincta, *Reeve*	II.	9
cinctella, *A. Adams*	VI.	45
clavulus, A. Adams	IV.	29
columella, A. Adams	V.	30
crocata, *A. Adams*	VI.	36
cylindrella, *A. Adams*	VI.	37
denticulata, *Sowerby*	VI.	39
dolabrata, *Linnæus*	II.	13
elegans, *A. Adams*	I.	2
fastigium, *A. Adams*	II.	11
fulva, *Sowerby*	VI.	42
glans, *Reeve*	III.	18
gracillima, *A. Adams*	VI.	44
guttata, Linklater	I.	5
hastata, *A. Adams*	IV.	26
maculosa, Lamarck	I.	5
mitralis, *A. Adams*	III.	20
modica, *A. Adams*	VI.	41
monilis, *A. Adams*	I.	7
nitida, *A. Adams*	III.	17
nitidula, *A. Adams*	V.	35
nodocincta, *A. Adams*	III.	19
ornata, *Gould*	V.	30
perforata, *A. Adams*	II.	10
propinqua, *A. Adams*	III.	22
pulchella, *A. Adams*	IV.	24
punctata, *Chemnitz*	I.	5
pupina, *A. Adams*	VI.	40
pusillus, *A. Adams*	V.	31
scitula, *A. Adams*	II.	16
serotina, *A. Adams*	VI.	43
striatula, *A. Adams*	V.	32
subulina, *A. Adams*	VI.	38
sulcata, *A. Adams*	II.	12
terebelloides, *A. Adams*	I.	8
terebellum, *Müller*	II.	14
teres, *A. Adams*	I.	6
tessellata, *A. Adams*	I.	4
turrita, *A. Adams*	I.	3
variegata, *A. Adams*	III.	23
ventricosa, *Guerin*	II.	15

MONOGRAPH

OF THE GENUS

CERITHIUM.

"I love the Sea; she is my fellow-creature,
My careful purveyor; she provides me store
She walls me round, she makes my diet greater
She wafts my treasure from a foreign shore."

Quarles.

1.

2.a.

2.b

3.

4.

5.

6.

Sowerby, del et lith.

Vincent Brooks, Imp

CERITHIUM.

PLATE I.

Genus CERITHIUM, Bruguière.

Testâ marinâ, turritâ, irregulariter varicosâ, longitudinaliter plicatâ seu tuberculatâ, anfractibus numerosis, plerumque gradatim crescentibus; aperturâ supernè in canalem contracto, labio interno posticè plus minusve calloso, canali antico plus minusve producto.

Shell marine, turreted, irregularly varicose, longitudinally plaited or tuberculated, whorls numerous, for the most part gradually increasing; aperture above contracted into a canal, inner lip posteriorly more or less callous, anterior canal more or less produced.

In the latest monograph of this genus of shells produced by Mr. Sowerby, with assistance from Mr. Arthur Adams, a large number of species are included which it may here be convenient to separate. The genus *Vertagus*, characterized by a reflected canaliferous tube, appears to form a natural, and almost definable group. Also, it may be advisable to treat as separate genera those groups which contain the shells of more fluviatile mollusca. Although the genus *Cerithopsis* is excluded on account of the structure of the animal, there does not appear to be any sufficient means to distinguish the subcylindrical group of little species, resembling the latter genus in form, to which some authors apply the name "*Bittium*," of which *C. reticulatum* is the type. The half-a-dozen species which have been distinguished under the name "*Colina*," having the last whorl more or less contracted, are also included in the present genus.

The genus *Cerithium*, as here constituted, contains 149 species, of which some few are described for the first time. Their geographical distribution is very extended, the genus being represented in North America as well as in South Australia, in Europe, Asia, and Africa. On the whole, southern climates seem most favourable to the development of the race. The few species composing the "*Colina*" group are from Port Natal. North America and Great Britain present a few species, the latter very few, and those of the "*Bittium*" group. But of the species whose localities are known, no less than thirty-eight were collected by the late Mr. Cuming in the Philippine Islands.

Species 1. (Mus. Cuming.)

CERITHIUM CITRINUM. *Cerith. testâ pyramidatâ, solidâ, spiraliter striatâ, citrinâ; anfractibus longitudinaliter plicatis, medio ventricosis, supernè planulatis, plicis distantibus, magnis, rotundis, ultimo anfractu univaricoso, infrà rotundo; aperturâ magnâ, posticè canaliferâ, anticè tubâ canaliferâ elongatâ, productâ, recurvâ, labro expanso, laqueato.*

THE CITRON CERITHIUM. Shell pyramidal, solid, spirally striated, citron-coloured; whorls longitudinally plaited, ventricose in the middle, flattened above, plaits distant, large, round, the last whorl with a single varix, rounded beneath; aperture large, with a posterior canal, and an elongated, produced and recurved anterior canaliferous tube, outer lip expanded, fluted.

SOWERBY, Thes. Conch. vol. ii. p. 855. pl. 179. f. 66.

Hab. Island of Masbate, Philippines.

Distinguished from most other species by the elongated and somewhat recurved canal.

Species 2. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM COLUMNA. *Cerith. testâ rugosâ, breviusculâ, ventricosâ, varicibus irregularibus magnis munitâ, spiraliter crebri-liratâ, longitudinaliter angulatim plicatâ, albâ, inter plicas fusco-nigrescente lineatâ; anfractibus numerosis, medio angulatis, plicis distantibus, acutis armatis; aperturâ magnâ, posticè canaliferâ, anticè tubâ canaliferâ elongatâ, subtortuâ, indutâ, labro expanso, laqueato.*

THE COLUMN CERITHIUM. Shell rough, rather short, ventricose, strengthened by large irregular varices, spirally many-ridged, longitudinally angularly plaited, white, between the plaits marked with blackish-brown lines; whorls numerous, angular in the middle, armed with distant, sharp plaits; aperture large, with posterior canal, in front provided with a long, rather tortuous canal-tube, outer lip expanded, fluted.

SOWERBY, Genera of Shells, No. 42. f. 7.

Hab. Philippine Islands; Cuming.

Specimens of this species vary, some of them having numerous irregular varices. The longitudinal plaits are produced into angular points at the centre of the whorls.

Species 3. (Mus. Cuming.)

CERITHIUM NODULOSUM. *Cerith. testâ magnâ, solidâ, pyramidatâ, longitudinaliter plicatâ, spiraliter lineis incisis striatâ, griseâ, maculis fusco-nigrescentibus variegatâ; anfractibus medio ventricosis, angulatis, plicis maximis rotundis; aperturâ magnâ, canali postico valido, labio interno laminato, columellâ uniplicatâ, canali oblongo, subrecurvo, labro radiatim expanso, supernè trilobato, supra medium angulato, anticè laqueato, trans canalem producto.*

THE NODULOUS CERITHIUM. Shell large, solid, pyramidal, longitudinally plaited, spirally striated with incised lines, grey, variegated with blackish-brown spots; whorls ventricose in the middle, angulated, with very large round plaits; aperture large, posterior canal distinct, inner lip laminar, columella single-plaited, canal oblong, turned slightly backwards, outer lip radiately expanded, trilobed above, angular above the middle, fluted in front, and produced across the canal.

BRUGUIÈRE, Dict. No. 8.

Murex aluco, Born (not of Linnæus).

Murex tuberosus, Dillwyn (not *Buccinum tuberosum* of Fabricius).

Murex nodulosus, Wood.

Hab. Molucca and Philippine Islands.

Species 4. (Mus. Cuming.)

CERITHIUM SUBNODOSUM. *Cerith. testâ oblongo-subcylindraceâ, solidâ, pallidâ, grisescente, castaneo latè fasciatâ, longitudinaliter plicatâ, plicis subobliquis ad suturam nodulosis, ad angulum acuminatis infrà medium evanidis; anfractibus numerosis, supra medium angulatis; aperturâ albâ, canali brevi aperto.*

THE SUBNODOSE CERITHIUM. Shell oblong-subcylindrical, solid, pale, greyish, widely banded with chestnut, longitudinally plaited, plaits slightly oblique, nodose at the suture, sharp at the angle, disappearing below the centre, whorls numerous, angular above the centre; aperture white, canal open, short.

ADAMS, Sowerby, Thes. Conch. vol. ii. p. 864. pl. 178. f. 47.

Hab. New Holland.

The plaits in each whorl are partly interrupted between the suture and the angle, they are prominent at the angle, and disappear below the middle.

Species 5. (Mus. Cuming.)

CERITHIUM TUBEROSUM. *Cerith. testâ rugosâ, pyramidatâ, solidâ, albâ-grisescente, maculis et strigis rubescentibus pictâ, longitudinaliter plicatâ, irregulariter varicosa, spiraliter sulcatâ; anfractibus medio angulatis, plicis distantibus, angustibus, medio angulatis; aperturâ magnâ, labro expanso, laqueato, trans canalem producto, canali postico valido, plicâ prominente, columellâ arcuatâ, canali oblongo, subtortuo.*

THE TUBEROSE CERITHIUM. Shell rugose, pyramidal, solid, greyish-white, painted with reddish spots and stripes, longitudinally plaited, irregularly varicose, spirally grooved; whorls angulated in the centre, plaits distant, narrow, angular in the centre; aperture large, outer lip expanded, fluted, produced across the canal, posterior canal distinct, with a prominent plait, columella arched, anterior canal oblong, slightly tortuous.

Buccinum tuberosum, Fabricius, Column. aquat. et terr. Obs. p. 53. f. 6.

Strombus striatus, Schroter.

Cerithium erythræonense, Lamark.

Cerithium tuberosum, Sowerby.

Hab. Near Suez.

Species 6. (Mus. Cuming.)

CERITHIUM RUPPELLII. *Cerith. testâ oblongo-cylindraceâ, albâ, grisescente, castaneo, maculatâ, longitudinaliter plicatâ, plicis noduliferis, nodulis prominentibus, distinctis, circularibus, anfractibus angulatis; aperturâ ovatâ, canali postico parvo, canali antico breviusculo, labro incrassato, subexpanso.*

RUPPELL'S CERITHIUM. Shell oblong-cylindrical, white, greyish, spotted with chestnut, longitudinally plaited, plaits noduliferous, nodules prominent, distinct, circular; whorls angulated; aperture ovate, posterior canal small, anterior canal rather short, outer lip thick, rather expanded.

PHILIPPI, Abbild. und Besch. Conch. Cerithium, pl.1. f.1.

Hab. —— ?

A rather cylindrical species, characterized by defined, rounded, prominent nodules.

7.b.

7.a.

8.

9.

10.

11.

12.

Sowerby del. et lith.

Vincent Brooks' Imp.

CERITHIUM.

PLATE II.

Species 7. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM NEBULOSUM. *Cerith. testâ ventricosâ, albidâ, obscurè griseo-nebulosâ, lineis interruptis et maculis magnis nigrescentibus variegatâ, spiraliter striatâ, anfractibus supernè angulatis, ad angulum tuberculis angulatis coronatis, ad marginem crenulatis, ultimo anfractu tuberculorum seriebus tribus ornato, aperturâ magnâ, posticè coarctatâ, columellâ posticè callo magno instructâ, anticè lamellatâ et reflexâ, canali brevi, recurvo, labro minutè denticulato et punctato.*

THE CLOUDED CERITHIUM. Shell ventricose, whitish, obscurely clouded with grey, variegated with interrupted lines and large blackish spots, spirally striated, whorls angulated above, crowned with angulated tubercles at the angle, crenulated at the edge, the last ornamented with three rows of tubercles, aperture large, contracted at the back, columella with a large callus at the back, lamellated and reflected in front, canal short, recurved, outer lip denticulated and spotted at the edge.

SOWERBY, Thes. Conch. Cerithium sp. 71.

Cerithium maculosum, Kiener.

Hab. Galapagos Island; Cuming.

This species resembles *C. adustum* in general appearance, but the whorls are crenulated at the edge and have a row of produced angular tubercles on the angle; the last whorl also has several rows of prominent tubercles. The name *maculatus*, used by Keiner to designate this species, had been previously employed for another.

Species 8.

CERITHIUM CÆRULEUM. *Cerith. testâ solidâ, ventricosâ, cæruleâ, nigro maculatâ, tuberculis rotundis, ad suturam parvis, ad angulum anfractuum magnis, infrà mediocribus munitâ, anfractibus paucis, ultimo magno, aperturâ magnâ, callo postico haud magno, anticè brevi, labro incrassato.*

THE SKY-BLUE CERITHIUM. Shell solid, ventricose, rather blue, spotted with black, having rounded tubercles, large at the angle of the whorls, small at the margin, and of middle size below, whorls few, angular, posterior callus not large, columella short at the base, outer lip expanded, thickened.

SOWERBY, Thes. Conch. Cerithium sp. 72.

Hab. Red Sea.

This is not difficult to distinguish from any other species.

Species 9.

CERITHIUM VULGATUM. *Cerith. testâ oblongâ, ventricosâ, griseo fulvo et fusco variegatâ, spiraliter striatâ, anfractibus numerosis, medio angulatis, supra angulum subexcavatis, tuberculis ad suturam mediocris rotundis, ad angulum magnis angulatis munitis, varicibus raris, albis, aperturâ breviusculâ, ovatâ, subexpansâ, canali brevissimo, callo mediocri.*

THE COMMON CERITHIUM. Shell oblong, ventricose, variegated with grey, light- and dark-brown, spirally striated, whorls numerous, angular in the centre, slightly hollowed above the angle, provided with middle-sized tubercles at the suture and large angular ones at the angle, varices few, white, aperture rather short, ovate, rather expanded, canal very short, callus on body-whorl middle-sized.

BRUGUIÈRE, Enc. Met. n. 13.

Strombus nodosus, Schrœter.

Cerithium thymetus, Meusch.

Hab. Mediterranean Sea.

Species 10. (Mus. Cuming.)

CERITHIUM ECHINATUM. *Cerith. testâ ventricosâ, crassâ, albâ, lineis et punctis rubris aspersâ, spiraliter sulcatâ, anfractibus angulatis, ad angulum tuberculis aculeatis elevatis magnis armatis, supra angulum subexcavatis, ultimo magno, seriebus quinque papillarum magnarum obtusarum armato, aperturâ mediocri, posticè coarctatâ, anticè in canalem brevem recurvum desinente, columellâ crassâ, ab anfractu ultimo distinctâ, callo magno postico munitâ, labro laqueato.*

THE PRICKLY CERITHIUM. Shell ventricose, thick, white, scattered with red lines and spots, spirally grooved, whorls angular, armed with large elevated pointed tubercles on the angle, rather hollow above the angle, last whorl large, having five rows of large obtuse papillæ, aperture middle-sized, contracted at the back, ending in a short recurved canal, columella

thick, distinct from the last whorl, having a large callus, outer lip fluted.

LAMARCK, Anim. sans vert. Cerithium sp. 12.
Cerithium mutatum, Sowerby.

Hab. Island of Annaa, Society Islands; Cuming.

Characterized by large tubercles pointing outwards and upwards.

Species 11. (Mus. Cuming.)

CERITHIUM ADANSONI. *Cerith. testâ irregulari, elongato-ventricosâ, albâ, rufo-punctatâ, spiraliter striatâ, tuberculis acutis extantibus armatâ, anfractibus numerosis, medio angulatis, aperturâ parviusculâ, callo postico crasso, canali brevi, labro echinato.*

ADANSON'S CERITHIUM. Shell irregular, elongated, ventricose, white, with reddish spots, spirally striated, armed with acute standing-out tubercles, whorls numerous, angular in the centre, aperture rather small, posterior callus thick, canal short, outer lip spinous.

BRUGUIÈRE, Enc. Méth. t. 1. p. 479.

Hab. Island of Annaa; Cuming. Senegal; Adanson.

In this species the spinous tubercles are more numerous, and the general surface of the shell more rugose, than in *C. echinatum*. It is also of a narrower form.

Species 12. (Mus. Cuming.)

CERITHIUM ADUSTUM. *Cerith. testâ ventricosâ, obscurè nigrescente, lineis interruptis et nebulis variegatâ, spiraliter striatâ, anfractibus ad latera compressiusculis, medio et prope suturam nodulorum seriebus cinctis, aperturâ utrinque canaliculatâ, versus spiram elevatâ, columellâ posticè callo magno instructâ, anticè lamellatâ, reflexâ, canali brevi, labro minutè denticulato et punctato.*

THE BURNT CERITHIUM. Shell ventricose, obscurely blackish, variegated with interrupted lines and cloudy spots, spirally striated, whorls slightly compressed at the sides, in the centre and near the suture surrounded with rows of nodules, aperture with a canal at each end, elevated towards the spire, columella with a large callus at the back, lamellated in front and reflected, canal short, outer lip minutely denticulated and punctured.

KIENER, Sp. Conch. p. 37. pl. 13. f. 2.

Hab. Galapagos Island; Cuming.

A well-known ventricose, cloudily-marked species.

13.

14.a.

14.b.

15.

16.a.

16.b.

17.

18.a.

18.b.

19.

Sowerby, del. et lith.

Vincent Brooks, Imp.

CERITHIUM.

PLATE III.

Species 13. (Mus. Cuming.)

CERITHIUM UNCINATUM. *Cerith. testâ pyramidatâ, acuminatâ, transversim striatâ, ad basin nodulis in seriebus duabus cinctâ, albâ, fusco marmoratâ et lineis punctatis ornatâ, anfractibus angulatis, medio tuberculis magnis atratis armatis, aperturâ parvâ, labio interno vix callosâ, canali brevi, labro subquadrato.*

THE HOOKED CERITHIUM. Shell tapering, acuminate, spirally striated, girt below with two series of nodules, white, mottled with brown and ornamented with punctured lines, whorls angular, armed with large black-tipped tubercles, aperture small, inner lip scarcely callous, canal short, outer lip rather square.

GMELIN, Murex, n. 57.

Cerithium famelicum, C. B. Adams.

Hab. Guadaloupe.

Species 14. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM ARMATUM. *Cerith. testâ elongatâ, acuminatâ, pallidè fulvâ, maculis rufo-nigrescentibus variegatâ, anfractibus numerosis, planis, nodulis magnis, paucis, extantibus prope suturam, et seriebus tribus papillarum parvarum infra cinctis, varicibus ad anfractum ultimum uno magno, aliis paucis parvis prope apicem dispositis, aperturâ subquadratâ, columellâ tenui, callo postico mediocri, labro crasso, aculeato, canali breviusculo, paulo recurvo.*

THE ARMED CERITHIUM. Shell elongate, acuminate, pale yellowish-brown, variegated with blackish-red spots, whorls numerous, flat, armed with few large nodules near the suture and three series of small papillæ beneath, varices one large on the last whorl and a few others smaller near the apex, aperture rather square, columella thin, with the posterior callus moderate in size, outer lip thick, aculeated, canal rather short, a little recurved.

PHILIPPI, Abbild. pl. 1. f. 9.

Hab. Island of Ticao, Philippines; Cuming.

In this shell the whorls themselves are not angular, but the row of large angular tubercles near the suture give them the appearance of being so.

Species 15. (Mus. Cuming.)

CERITHIUM UMBONATUM. *Cerith. testâ pyramidatâ, acuminatâ, rubro-fuscescente minutè interruptim lineatâ, anfractibus medio subexcavatis, ad suturam tuberculis magnis distantibus rotundis armatis, ultimo magno, nodulorum seriebus tribus medio et infra ornato, aperturâ magnâ, labio interno incrassato, callo postico rotundo, canali producto, recurvo, labro expanso, incrassato, posticè sinuato.*

THE BUCKLER CERITHIUM. Shell pyramidal, acuminated, minutely striped with reddish-brown interrupted lines, whorls slightly excavated in the middle, armed at the suture with large distant rounded tubercles, the last large, with three series of nodules in the centre and under, aperture large, inner lip thick, with a rounded posterior callus, canal produced, recurved, outer lip expanded, thickened, sinuated posteriorly.

SOWERBY, Thes. Conch. sp. 40.

Hab. Jamaica.

Characterized by the expansion of the lower whorls and aperture, and by the boss-like tubercles ranged in a prominent row near the suture, and three smaller rows on the lower parts of the whorls.

Species 16. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM CAUDATUM. *Cerith. testâ elongatâ, varicosâ, irregulari, spiraliter striatâ, nigrescente, apice varicibus et aperturâ albidis, anfractibus angulatis, supernè subexcavatis, ad suturam et ad angulum tuberculis coronatis, infra nodulis parvis seriatim ornatis, aperturâ effusâ, labio interno tenui, callo postico magno, canali producto, recurvo, labro subexpanso, ad marginem punctato, posticè coarctato.*

THE TAILED CERITHIUM. Shell elongated, varicose, irregular, spirally striated, rather black, with the apex varices and aperture white, whorls angular, hollowed above, crowned with rows of tubercles on the angle and at the suture, and ornamented with three rows of very small nodules beneath, aperture effuse, inner lip thin, with large posterior callus, canal long, recurved, outer lip rather expanded, spotted at the edge, rather narrowed behind.

SOWERBY, Thes. Conch. sp. 29.
Hab. Guadaloupe.

More irregular in form than the true *C. atratum* of Born, the aperture more expanded, and the canal longer and more defined.

Species 17. (Mus. Cuming.)

CERITHIUM POLYGONUM. *Cerith. testâ pyramidatâ, albidâ, grisescente, spiraliter profundè sulcatâ, costis magnis rotundis regularibus sequentibus indutâ, anfractibus numerosis, ultimo costâ magnâ infra cincto, aperturâ intus castaneo fasciatâ, canali breviusculo, labro sinuato.*

THE MANY-SIDED CERITHIUM. Shell pyramidal, whitish, tending to grey, spirally deeply grooved, provided with large regular ribs, following each other (from whorl to whorl), whorls numerous, the last girt with a large rib beneath, aperture within banded with chestnut, canal rather short, outer lip sinuated.

SOWERBY, Thes. Conch. sp. 22.
Hab. Port Essington; Jukes.

This species was described by Mr. Sowerby from the incomplete but unique specimen in Mr. Cuming's collection. The large rounded ribs are continuous from whorl to whorl, so as to give a many-sided form to the shell.

Species 18. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM DIALEUCUM. *Cerith. testâ pyramidatâ, rubro vel griseo et albo alternatim fasciatâ, spiraliter costatâ, longitudinaliter plicatâ, plicis medio anfractuum angulatis, canali producto, subrecurvo.*

THE HALF-WHITE CERITHIUM. Shell pyramidal, banded with red or grey and white alternately, spirally grooved, longitudinally plicated, the plicæ angulated in the centre of the whorls, canal produced, slightly recurved.

PHILIPPI, Abbildungen, pl. 1. f. 5.
Hab. Island of Ticao, Philippines.

This species presents some varieties of colour, but all preserving the general character of dark alternating with white stripes.

Species 19. (Mus. Cuming.)

CERITHIUM SPLENDENS. *Cerith. testâ pyramidatâ, medio vix ventricosâ, griseâ, varicibus albis, anfractibus numerosis, costellis moniliformibus, alternatim nigropunctatis, spiraliter cinctâ, aperturâ ovatâ, canali brevi, labro subexpanso.*

THE SPLENDID CERITHIUM. Shell pyramidal, very slightly ventricose in the middle, grey, varices white, whorls numerous, spirally girt with little beaded ribs, in which the beads are alternately black and white, aperture ovate, canal short, outer lip expanded.

SOWERBY, Thes. Conch. Cerithium sp. 101.
Hab. Island of Zebu, Philippines; Cuming.

This shell is much more pyramidal and tapering than *moniliferum*, which it resembles in other respects. On most of the costellæ the bead-like tubercles are alternately black.

21. a.

20.

21. b.

22.

23. a.

23. b.

24.

25. a.

25. b.

26.

CERITHIUM.

PLATE IV.

Species 20. (Mus. Cuming.)

CERITHIUM MONILIFERUM. *Cerith. testâ solidâ, subovali, breviusculâ, versus apicem attenuatâ, griseâ, varicibus albis, anfractibus paucis, breviusculis, tuberculis nigris ovatis elevatis in seriebus tribus ornatis, interstitiis striatis, aperturâ brevi, labro crasso crenulato, canali brevi, columellâ obtusâ.*

THE BEADED CERITHIUM. Shell solid, rather short, tending to oval, narrowing at the apex, grey, with white varices, whorls few, rather short, ornamented with black, oval, raised tubercles in three rows, interstices striated, aperture short, outer lip thick, crenulated, canal short, columella obtuse.

KIENER, Spec. Conch. pl. 16. f. 3.

Hab. Island of Panay, Philippines; Cuming.

Shorter and more oval in form than *C. splendens.*

Species 21. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM TUBERCULATUM. *Cerith. testâ solidâ, breviusculâ, ovatâ, versus apicem attenuatâ, albâ, nigro variegatâ, costis albis tuberculatis rugatis, aperturâ brevi, labro crasso crenulato, columellâ obtusâ.*

THE TUBERCULATED CERITHIUM. Shell solid, rather short, oval, tapering towards the apex, white, variegated with black, roughened with white tuberculated ribs, aperture short, outer lip thick, crenulated, columella obtuse.

LINNÆUS, Syst. Nat. n. 544.

Cerithium carbonarum, Philippi.

Hab. Island of Panay, Philippines.

The tubercles are larger and closer than in *C. moniliferum.*

Species 22. (Mus. Cuming.)

CERITHIUM ALTERNATUM. *Cerith. testâ subventricosâ, alternatim albo et fusco fasciatâ, anfractibus subangulatis, costis nodulosis acutis et interstitiis striatis fuscis alternatis, aperturâ ovali, canali brevi, recurvo.*

THE ALTERNATED CERITHIUM. Shell ventricose, alternately banded with white and brown, whorls rather angular, alternated with sharp nodulous ribs and striated interstices, aperture oval, canal short, recurved.

SOWERBY, Thes. Conch. Cerithium sp. 98.

Hab. Island of Ticao, Philippines; Cuming.

The white, sharply tuberculated ribs, alternating with brown striated interstices, give a very pretty appearance to this species.

Species 23. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM OCELLATUM. *Cerith. testâ pyramidatâ, nigrâ, punctis albis depressis in striis sculptâ, anfractibus rapidè crescentibus, angulatis, ad angulum acutè tuberculatis, ultimo anfractu subquadrato, magno, aperturâ magnâ, columellâ brevissimâ, posticè callosâ, labro expanso, lirato.*

THE EYED CERITHIUM. Shell pyramidal, black, striated with rows of white punctures, whorls quickly increasing, angular, acutely tuberculated at the angle, last whorl rather square, large, aperture large, columella short, with a posterior callus, outer lip expanded, lirated.

BRUGUIÈRE, Enc. Méth. Cerith. 43.

Cerithium irroratum et *C. interruptum*, Gould.

Hab. Gulf of California.

On minute examination, the spiral striæ are found to be sculptured with little white lined pits.

Species 24. (Mus. Cuming.)

CERITHIUM TRAILLI. *Cerith. testâ pyramidatâ, ventricosâ, pallidè fulvâ grisescente, varicibus albis, nodulis parvis regularibus, nigrescentibus in seriebus cinctâ, anfractibus rectiusculis, gradatim crescentibus, ultimo rotundo, aperturâ rotundâ, canali brevi, labro rotundo, expanso, crenulato.*

TRAILL'S CERITHIUM. Shell pyramidal, ventricose, palefulvous, tending to grey, with white varices, girt with regular rows of blackish small tubercles, whorls rather straight, gradually increasing, the last round, aperture round, canal short, outer lip round, expanded, crenulated.

SOWERBY, Thes. Conch. Cerithium sp. 93.

Hab. Singapore; Traill.

Of a more regularly pyramidal form than *C. moniliferum*, and much more robust and ventricose than *C. splendens.*

Species 25. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM LITTERATUM. *Cerith. testâ breviusculâ, conico-ventricosâ, granuloso-striatâ, albâ, maculis rubris vel nigris quadratis tessellatâ, anfractibus paucis, prope suturam angulatis, ad angulum tuberculis acutis armatis, ultimo anfractu magno, aperturâ magnâ, subquadratâ, posticè in canalem contracto, canali antico breviusculo, labro expanso, anticè producto.*

THE LETTERED CERITHIUM. Shell rather short, conically ventricose, with granular striæ, white, tessellated with red or black square spots, whorls few, angular near the suture, armed with sharp tubercles, last whorl large, aperture large, rather square, posteriorly contracted into a canal, anterior canal rather short, outer lip expanded, produced in front.

BORN, Ind. Mus. Cæs. p. 323. t. xi. f. 14, 15.

Hab. West Indies.

Species 26. (Mus. Cuming.)

CERITHIUM BORNII. *Cerith. testâ breviusculâ, ventricosâ, nigrâ, anfractibus tuberculis magnis in seriebus duabus armatis, aperturâ parvâ, columellâ posticè callosâ, anticè brevissimâ, labro tenui.*

BORN'S CERITHIUM. Shell rather short, ventricose, black, whorls armed with large tubercles in two series, aperture small, columella with a posterior callus, very short in front, outer lip thin.

SOWERBY, Thes. Conch. Cerithium sp. 88.
Cerithium tuberculatum, Born.

Hab. Island of Seychelles.

Each whorl has two rows of very large tubercles.

27. b.

27. a.

28.

29.

30.

31.

32.

33. a.

33. b.

34.

Sowerby, del. et lith.

Vincent Brooks, Imp.

CERITHIUM.

PLATE V.

Species 27. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM LEMNISCATUM. *Cerith. testâ pyramidatâ, albâ, castaneo bifasciatâ, anfractibus frequentibus, triseriatim acutè tuberculatis, medio subangulatis tuberculis majoribus, aperturâ breviusculâ, canali brevi, rectiusculo, labro incrassato, intus crenulato.*

THE DECORATED CERITHIUM. Shell pyramidal, white, with two bands of chestnut colour, whorls numerous, with three rows of tubercles, rather angular in the centre with larger tubercles, aperture rather short, canal short, rather straight, outer lip thick, crenulated within.

QUOY, Voyage de l'Astrolabe, pl. 54. f. 16–18.

Hab. St. Nicholas, Island of Zebu, Philippines; Cuming.

This beautiful shell has a band of dark-chestnut colour on the whorls, near the suture, and another showing only a little above the suture and entirely on the last whorl. It is sharply tuberculated in three rows.

Species 28. (Mus. Cuming.)

CERITHIUM NITIDUM. *Cerith. testâ subventricosâ, fulvâ, tuberculis fuscis acutis in seriebus moniliformibus tribus dispositis, armatâ, inter tubercula striatâ, aperturâ breviusculâ, subrotundâ, canali mediocri, recurvo, labro crasso, crenulato.*

THE NEAT CERITHIUM. Shell rather ventricose, light brown, armed with sharp small dark-brown tubercles, placed in three necklace-like rows, striated between the tubercles, aperture rather short, rounded, canal of middle size, bent backwards, outer lip thick, crenulated.

SOWERBY, Thes. Conch. Cerithium sp. 100.

Hab. Island of Bohol, Philippines.

There is a peculiar neatness in the sculpture of this species. The sharply-defined rows of little tubercles are of a darker colour than the groundwork on which they are placed.

Species 29. (Mus. Cuming.)

CERITHIUM CORALLINUM. *Cerith. testâ pyramidatâ, elongatâ, fusco-nigrescente, anfractibus numerosis, subventricosis, longitudinaliter plicatis, plicis solidis, rotundis, spiraliter tricostatis, et inter striatis, suturâ excavatâ, aperturâ ovali, pallidè fulvâ, labio interno posticè calloso, labro crasso, intus crenulato.*

THE CORALLINE CERITHIUM: Shell tapering, long, brown, tending to black, whorls numerous, rather ventricose, longitudinally plicated (the plicæ solid, round), spirally crossed by three ribs and striated between, suture excavated, aperture oval, pale-brown, inner lip callous at the back, outer lip thick, crenulated within.

SOWERBY, Thes. Conch. Cerithium sp. 59.

Hab. Island of Panay, Philippines; Cuming.

The whorls in this dark-brown species are characterized by three thick spiral ribs crossing thick longitudinal plaits.

Species 30. (Mus. Cuming.)

CERITHIUM NOVÆ-HOLLANDIÆ. *Cerith. testâ turritâ, pyramidatâ, elongatâ, angustâ, striatâ, albâ, anfractibus numerosis, infrà fusco variegatis, plicis longitudinalibus, subflexuosis, supernè prope suturam tumidis munitis, ultimo anfractu costis tribus tuberculatis cincto, aperturâ albâ, obliquâ, canali brevi, subrecurvo, labro subexpanso, intus crenulato.*

THE NEW HOLLAND CERITHIUM. Shell turreted, pyramidal, elongated, narrow, striated, white, whorls numerous, variegated with brown at the lower part, provided with longitudinal rather flexuous plaits, which are rather tumid above near the suture, the last whorl girt with three tuberculated ribs, aperture white, oblique, canal short, bent a little backwards, outer lip rather expanded, crenulated within.

A. ADAMS, Sowerby's Thes. Conch. Cerithium sp. 63.

Hab. New Holland.

The upper part of the whorls is banded with white, and the longitudinal plaits or ribs are swelled near the suture.

Species 31. (Mus. Cuming.)

CERITHIUM STRIATISSIMUM. *Cerith. testâ subelongatâ, griseo-nigrescente, varicibus numerosis, albis, minutè spiraliter striatâ, striis alternis noduliferis, anfractibus subangulatis, nodulis ad angulum et ad suturam paulo majoribus, aperturâ subovali, posticè contractâ,*

canali antico breviusculo, labro incrassato, castaneo prope marginem fasciato.

THE MUCH-STRIATED CERITHIUM. Shell rather long, blackish-grey, with numerous white varices, minutely striated spirally, the alternate striæ beaded, whorls rather angular, the nodules at the angle and at the suture rather larger, aperture oval, contracted posteriorly, anterior canal rather short, outer lip thickened, banded with chestnut near the margin.

SOWERBY, Thes. Conch. Cerithium sp. 30.

Hab. —— ?

Species 32. (Mus. Cuming.)

CERITHIUM ATRATUM. *Cerith. testâ turritâ, pyramidatâ, nigrâ, varicibus albescentibus, spiraliter striatâ, striis subgranosis, anfractibus graduatis, angulatis, ad angulum tuberculis pliciformibus subacutis cinctis, supernè subexcavatis, ad suturam tumidis crenulatis, aperturâ cæruleâ, columellâ brevi, canali brevi, labro expanso, ad marginem crenulato.*

THE BLACK CERITHIUM. Shell turreted, pyramidal, black, with whitish varices, spirally striated, striæ granulated, whorls graduated, angular, circled with plait-like rather sharp tubercles, slightly excavated above the angle, swelled and crenulated at the suture, aperture blue, columella short, canal short, outer lip expanded, crenulated at the margin.

BORN, Mus. Cæs. p. 324. t. 11. f. 17, 18.

Hab. Sicily.

A stout, solid, pyramidal form, of very dark colour. The name has sometimes been applied to the more lightly and irregularly formed shell named *C. caudatus* by Mr. Sowerby, but this is doubtless the true shell of Born.

Species 33. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM PATULUM. *Cerith. testâ brevi, ventricosâ, irregulariter varicosâ, fuscâ, anfractibus longitudinaliter plicatis, costis duabus spiralibus validis tuberculiferis cinctis, ultimo magno, distorto, varicoso, aperturâ expansâ, canali rectiusculo, labro crasso, patulo, intus crenato.*

THE PATULOUS CERITHIUM. Shell short, ventricose, irregularly varicose, brown, whorls longitudinally plicated, encircled with two strong tuberculated spiral ribs, last whorl large, distorted, varicose, aperture expanded, canal rather straight, outer lip thickened, patulous, crenulated within.

SOWERBY, Thes. Conch. Cerithium sp. 97.

Hab. Island of Panay, Philippines; Cuming.

This species is remarkable for the expanded outer lip of the aperture.

Species 34. (Mus. Cuming.)

CERITHIUM BIFASCIATUM. *Cerith. testâ breviusculâ, solidâ, striatâ, albâ, fasciis latis castaneis cinctâ, anfractibus paucis, in seriebus tribus tuberculatis, ultimo bifasciato, seriebus tuberculorum sex sculptâ, aperturâ brevi, canali brevi, labro crasso, crenulato.*

THE DOUBLE-BANDED CERITHIUM. Shell rather short, solid, striated, white, encircled with broad chestnut bands, whorls few, tuberculated in three rows, the last with two bands and six rows of tubercles, aperture short, canal short, outer lip thick, crenulated.

SOWERBY, Thes. Conch. Cerithium sp. 110.

Hab. St. Nicholas, Island of Zebu, Philippines; Cuming.

Shorter and thicker than *C. lemniscatum*, and having the tubercles rounded, instead of being sharply angular, as in that species.

35. a.

35. b.

35. c.

36.

37. a.

37. b.

38. a.

39.

40.

38. b.

CERITHIUM.

PLATE VI.

Species 35. (Fig, *a*, *b*, *c*, Mus. Cuming.)

CERITHIUM EBURNEUM. *Cerith. testâ turritâ, elongatâ, acuminatâ, albâ, plerumque maculis rufo-fuscis seu nigrescentibus irregulariter variegatâ, varicibus irregularibus, albis, anfractibus medio angulatis, tuberculorum seriebus tribus cinctis, tuberculis ad angulum acutangulatis, ad suturam subrotundatis, aperturâ subrotundâ, canali brevisculo, labro crasso, subexpanso.*

THE IVORY CERITHIUM. Shell turreted, elongated, acuminated, white, generally variegated with irregular spots (or patches) of reddish-brown or blackish, varices irregular, white, whorls angular in the middle, encircled with three rows of tubercles, tubercles acute at the angle rather rounded at the suture, aperture rather rounded, canal rather short, outer lip thick, rather expanded.

BRUGUIÈRE, Enc. Méth. n. 41.

Cerithium algicola, C. B. Adams.

Hab. Jamaica.

This pretty species is subject to great variations in colouring.

Species 36. (Mus. Cuming.)

CERITHIUM PURPURASCENS. *Cerith. testâ brevi, ventricosâ, conicâ, pallidè purpureâ, tuberculis acutis rubromaculatis seriatim cinctâ, varicibus albis, anfractibus angulatis, aperturâ ovali, canali longiusculo, labro subexpanso, intus crenulato.*

THE PURPLISH CERITHIUM. Shell short, ventricose, conical, pale-purple, with sharp tubercles coloured with reddish-brown spots, varices white, whorls angulated, aperture oval, canal rather long, outer lip rather expanded, crenulated within..

SOWERBY, Thes. Conch. Cerithium sp. 99.

Hab. Philippines; Cuming.

The shell figured may be regarded as the type of a species which presents many varieties of colouring.

Species 37. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM SANDVICHENSE. *Cerith. testâ brevisculâ, ventricosâ, albâ, spiraliter tenuiter liratâ, longitudinaliter plicis rotundis validis costatâ, anfractibus novem subventricosis, ultimo subovali, subrostrato, aperturâ ovatâ, canali brevi, labro recurvo.*

THE SANDWICH-ISLAND CERITHIUM. Shell rather short, ventricose, white, spirally lirated, longitudinally ribbed with strong rounded plaits, whorls nine, rather ventricose, the last rather oval, produced into a beak, aperture oval, canal short, outer lip turned inwards.

SOWERBY.

Hab. Sandwich Islands.

The only specimen we have of this ventricose white shell is not fully formed in the aperture, being incomplete.

Species 38. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM SEMIFERRUGINEUM. *Cerith. testâ brevisculâ, ventricosâ, albâ, maculis magnis et punctis ferrugineis irregulariter pictâ, spiraliter striatâ, anfractibus paucis, supernè angulatis, ad angulum tuberculis magnis, subacutis, et infrà prope suturam tuberculis minoribus armatis, ultimo magno, seriatim tuberculato, aperturâ magnâ, supernè contractâ, canali mediocri, subrecurvo, labro expanso, subquadrato.*

THE IRON-PAINTED CERITHIUM. Shell rather short, ventricose, white, irregularly painted with large spots and dots of a ferrugineous colour, spirally striated, whorls few, angular above, armed at the angle with large rather sharp tubercles and near the suture with smaller ones, last whorl large, with rows of tubercles, aperture large, narrowed above, canal middle-sized, slightly recurved, outer lip expanded, rather square.

LAMARCK, Anim. sans vert.

Cerithium tuberculatum, Sowerby.

Hab. West Indies.

Very similar in form to *C. litteratum*, but it is smoother between the ridges, and the colouring is laid on in irregular patches.

Species 39. (Mus. Cuming.)

CERITHIUM FENESTRATUM. *Cerith. testâ pyramidatâ, acuminatâ, albâ, varicosâ, anfractibus longitudinaliter plicatis, et costellis acutis spiralibus cancellatis, interstitiis castaneis, aperturâ rotundâ, labro crasso, intus crenato.*

THE WINDOW CERITHIUM. Shell tapering, acuminated, white, varicose, whorls longitudinally plaited and cancellated by the crossing of sharp spiral ribs, interstices chestnut-colour, aperture rounded, outer lip thick, crenulated within.

SOWERBY, Thes. Conch. Cerithium sp. 46.

Hab. —— ?

The peculiarity of this shell consists in the square hollows formed between the longitudinal plaits and the raised spiral lines which cross them.

Species 40. (Mus. Cuming.)

CERITHIUM MUSICUM. *Cerith. testâ brevi, subventricosâ, albâ, nigro-lineatâ et maculatâ, anfractibus paucis, supra medium angulatis, inter angulum et suturam excavatis, ultimo anfractu magno, ovali, aperturâ effusâ, canali brevissimo, obliquo.*

THE MUSIC CERITHIUM. Shell short, rather ventricose, white, with black lines and spots, whorls few, angulated above the centre, rather hollow between the angle and the suture, last whorl large, oval, aperture effuse, canal very short, oblique.

SOWERBY, Thes. Conch. Cerithium sp. 68.

Hab. —— ?

The proportions of this shell are very different from those of *C. vulgatum*, the last whorl occupying more than half the length. In characteristic specimens the music-like lines are crossed by lines and spots.

41.b.

41.a.

41.c.

42.

43.a.

43.b.

44.

45.a.

45.b.

46.

CERITHIUM.

PLATE VII.

Species 41. (Fig. *a*, *b*, *c*, Mus. Cuming.)

CERITHIUM VARIEGATUM. *Cerith. testâ brevi, ventricosâ, apice acuminatâ, albâ, fulvo et aurantio variegatâ vel fusco-nigrescente, anfractibus irregularibus, duobus ultimis inflatis, nodulis parvis lævigatis in seriebus dispositis cinctis, aperturâ albâ, subovali, canali brevi.*

THE VARIEGATED CERITHIUM. Shell short, ventricose, acuminate at the apex, white, varied with fawn and orange or blackish-brown, whorls irregular, the last two inflated, girt with rows of small smooth tubercles, aperture white, rather oval, canal short.

QUOY, Voy. de l'Astrolabe, pl. 55. f. 17.

Hab. Philippines; Cuming.

Remarkable for the variations which occur in the colouring of different specimens, of which the three shells figured may be considered a sample; in all, the darker colours are *upon* the rows of nodules in interrupted lines.

Species 42. (Mus. Cuming.)

CERITHIUM MORUS. *Cerith. testâ ovali, brevi, ventricosâ, atratâ, striatâ, anfractibus seriebus tribus tuberculorum cinctâ, tuberculis rotundis lævibus, aperturâ brevi, ovatâ, canali brevi, labro crasso, intus ad marginem tæniato.*

THE MULBERRY CERITHIUM. Shell oval, short, ventricose, black, striated, whorls encircled with three rows of tubercles, tubercles rounded, smooth, aperture short, oval, canal short, outer lip thick, striped at the margin within.

LAMARCK, Hist. Nat. Anim. sans vert.

Hab. Red Sea. Madagascar.

Some varieties of this species are variegated with lighter colours, similar to those of *C. variegata;* but the more solid and regular rows of tubercles and more regular form sufficiently distinguish this species from the latter.

Species 43. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM PETROSUM. *Cerith. testâ brevi, ventricosâ, irregulariter pupæformi, varicosâ et tuberculatâ, pallidè fulvâ, tuberculis irregularibus seriatim sequentibus, variè albis et nigris, aperturâ ovatâ, canali distincto, brevi, labro tenui, intus crenulato.*

THE STONY CERITHIUM. Shell short, ventricose, irregularly pupæform, varicose and tuberculated, pale fulvous, tubercles in irregular rows, variously white and black, aperture ovate, canal distinct, short, outer lip thin, crenulated within.

WOOD, Ind. Test. Suppl. pl. 4. f. 9.

Hab. East Indian Archipelago.

Differing from *C. variegatum* in being more ventricose and irregular; the tubercles are larger and coarser, giving the shell an appearance of being set with black and white pebbles of different sizes.

Species 44. (Mus. Cuming.)

CERITHIUM ROBUSTUM. *Cerith. testâ pyramidali, solidâ, ventricosâ, albâ, spiraliter striatâ, anfractibus gradatim crescentibus, costis spiralibus tribus striatis crassis tuberculiferis cinctis, interstitiis cæruleis minutè scabroso striatis, ultimo costis septem, varicibus nullis, aperturâ ovatâ, intus nigro fasciatâ, canali valido, labro subexpanso.*

THE STOUT CERITHIUM. Shell pyramidal, solid, ventricose, white, spirally striated, whorls gradually enlarged, with three spiral, tuberculated, striated, thick ribs, interstices blue, minutely and roughly striated, the last whorl with seven ribs, varices none, aperture ovate, black-banded within, canal strong, outer lip rather expanded.

SOWERBY.

Hab. —— ?

Of this species only one specimen exists in Mr. Cuming's collection; it is a more solid shell and more regularly pyramidal than *C. alternatum*. The ribs are thicker and striated. The colour between the ribs is grey.

Species 45. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM RUGOSUM. *Cerith. testâ crassâ, ventricosâ, griseâ, varicibus albis, irregularibus, anfractibus paucis, longitudinaliter plicatis, costis tribus (ultimo plurimis) rudè tuberculatis cinctis, inter tubercula maculis nigris pictis, aperturâ brevi, canali brevissimo, labro crasso, intus crenato.*

THE ROUGH CERITHIUM. Shell thick, ventricose, grey,

with white irregular varices, whorls few, longitudinally plicated, encircled with three (the last with more) roughly tuberculated ribs, painted with black spots between the tubercles, aperture short, canal very short, outer lip thick, crenulated within.

Wood, Ind. Test. Suppl. pl. 4. f. 10.

Cerithium breve, Quoy.

Hab. Philippines; Cuming.

The tubercles in this species are in longitudinal rows, so as to form plicæ, which are rendered more conspicuous by the black spots on the ribs between them.

Species 46. (Mus. Cuming.)

Cerithium breviculum. *Cerith. testâ brevissimâ, ventricosâ, nigrescente, tuberculorum seriebus cinctâ, anfractibus paucis, aperturâ ovali, albâ, canali brevissimo, labro intus crenato.*

The short Cerithium. Shell very short, ventricose, nearly black, encircled with rows of tubercles, whorls few, aperture oval, white, canal very short, outer lip crenulated.

Sowerby, Genera of Shells, Cerithium f. 1.

Hab. Philippines; Cuming.

This short, stout little shell is not likely to be confounded with any other species of the genus.

48.a.

47.

48.b.

49.

50.a.

50.b.

51.

52.

53.

54.

CERITHIUM.

PLATE VIII.

Species 47. (Mus. Cuming.)

CERITHIUM FUSIFORME. *Cerith. testâ elongato-turritâ, striatâ, longitudinaliter plicatâ, albâ, inter plicas castaneâ, plicis tuberculiferis, anfractibus medio angulatis, ultimo infrà costis duabus moniliformibus cincto, aperturâ expansâ, posticè angustatâ, canali elongato, angustato, obliquo, labro expanso, acutè laqueato.*

THE FUSIFORM CERITHIUM. Shell elongately turreted, striated, longitudinally plicated, white, between the plaits chestnut-painted, plaits tuberculated, whorls angular in the middle, the last girt with two beaded ribs below, aperture expanded, narrowed at the upper part, canal long, narrow, oblique, outer lip expanded, acutely fluted.

SOWERBY, Thes. Conch. Cerithium sp. 52.

Hab. Philippines; Cuming.

This little shell is remarkable for the length of its narrow canal and for the elegant sharp fluting of the expanded outer lip.

Species 48. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM CORONATUM. *Cerith. testâ oblongo-turritâ, minutè scabrâ, aurantiâ, anfractibus scalatis, supernè ad suturam albis, tumidis, tuberculis paucis magnis scabrosis coronatis, infrà rectiusculis, aperturâ subquadratâ, expansâ, canali producto, angusto, labro variciformi.*

THE CORONATED CERITHIUM. Shell oblong-turreted, minutely scabrous, orange-coloured, whorls in steps, above at the suture white, swelled, and coronated with few large scabrous tubercles, below rather straight, aperture rather square, expanded, canal produced, narrow, outer lip in the form of a varix.

SOWERBY, Thes. Conch. Cerithium sp. 57.

Hab. Philippines; Cuming.

The white band and row of large tubercles at the top of each whorl in this species, gives it a peculiarity of appearance that distinguishes it from all others.

Species 49. (Mus. Cuming.)

CERITHIUM GRACILIFORME. *Cerith. testâ angustâ, elongatâ, minutè seriatim tuberculiferâ, albâ, fulvo variegatâ, varicibus magnis, irregularibus, anfractibus numerosis, subangulatis, aperturâ ovali, canali brevi aperto.*

THE SLENDER CERITHIUM. Shell narrow and long, minutely tuberculated in rows, white, variegated with light fawn, varices large, irregular, whorls numerous, slightly angulated, aperture oval, canal short, open.

SOWERBY.

Hab. —— ?

Much more elongated than *C. eburneum* (sp. 35), and having much less angular whorls.

Species 50. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM SPATHULIFERUM. *Cerith. testâ pyramidatâ, striatâ, albidâ, longitudinaliter plicatâ, anfractibus rectiusculis, medio et infrà seriebus duabus (ultimo tribus) tuberculorum armatis, tuberculis productis, planulatis, aperturâ obliquâ, posticè angustatâ, canali producto, angusto, labro subdigitato.*

THE SPADE CERITHIUM. Shell pyramidal, striated, whitish, longitudinally plaited, whorls rather straight, armed at the middle and below with two rows of large produced flattened tubercles (three in the last whorl), aperture oblique, narrowed behind, canal produced, narrow, outer lip rather digitated.

SOWERBY, Thes. Conch. Cerithiu sp. 39.

Hab. —— ?

The tubercles in this species are flattened into a spade-like shape.

Species 51. (Mus. Cuming.)

CERITHIUM GUINIACUM. *Cerith. testâ breviusculâ, ventricosâ, leviter striatâ, albâ, epidermide fusco-virescente, in fasciam latam indutâ, anfractibus longitudinaliter plicatis, plicis magnis, rotundis, suprà ad suturas tumidis, aperturâ magnâ, canali brevi, labro simplici.*

THE GUINEA-COAST CERITHIUM. Shell rather short, ventricose, lightly striated, white, covered with a greenish-brown epidermis in a broad band, whorls longitudinally plicated, plaits large, rounded, tumid at the upper part near the suture, aperture large, canal short, outer lip simple.

PHILIPPI, Abbildungen, pl. 1. f. 13.

Hab. Lord Hood's Island, coast of Guinea; Cuming.

As in some one or two species of many other genera, the band of colouring matter resides in the epidermis and comes off with it, leaving the shell white.

Species 52. (Mus. Cuming.)

CERITHIUM SCABRIDUM. *Cerith. testâ oblongo-turritâ, spiraliter striatâ, scabrâ, albâ, castaneo irregulariter strigato et maculato, anfractibus medio angulatis, ad angulum acutè tuberculiferis, aperturâ ovali, canali mediocri, aperto, labro expanso.*

THE ROUGHENED CERITHIUM. Shell oblong-turreted, spirally striated, scabrous, white, irregularly striped and spotted with chestnut, whorls angular in the middle, with acute tubercles on the angle, aperture oval, canal middle-sized, open, outer lip expanded.

PHILIPPI.

Hab. —— ?

A bright little species, with angular whorls and white angular plaits.

Species 53. (Mus. Cuming.)

CERITHIUM MEDITERRANEUM. *Cerith. testâ oblongo-turritâ, spiraliter lineis impressis striatâ, albido-subcæruleâ, castaneo-nigrescente maculatâ et strigatâ, anfractibus angulatis, ad suturam tuberculis numerosis rotundis, ad angulum magnis, productis, cinctis, ultimo anfractu depresso, subcontracto, aperturâ parvâ, canali brevi, aperto, labro simplici.*

THE MEDITERRANEAN CERITHIUM. Shell oblong-turreted, spirally striated with impressed lines, whitish-grey, spotted and striped with very dark chestnut-colour, whorls angulated, circled at the suture with numerous rounded tubercles and at the angle with large prominent ones, last whorl depressed, rather contracted, aperture small, canal short, open, outer lip simple.

DESHAYES, ed. Lamarck, t. ix. p. 292.

Cerithium fuscatum, Costa.

Hab. Mediterranean.

A well-known form, subject to considerable variation of colour.

Species 54. (Mus. Cuming.)

CERITHIUM SUTURALE. *Cerith. testâ breviusculâ, scabroso-striatâ, albâ, ad suturam et lineâ purpureâ cinctâ, apice purpureo, anfractibus numerosis, plicis tuberculiferis magnis, medio angulatis munitis, aperturâ parvâ, subrotundâ, canali brevi, labro crenulato.*

THE SUTURED CERITHIUM. Shell rather short, with scabrous striæ, white, with a purple line at the suture, apex purple, whorls numerous, provided with large tuberculated plicæ, angular in the middle, aperture small, rather round, canal short, outer lip crenulated.

PHILIPPI, Abbildungen, Cerith. t. i. f. 4.

Hab. Island of Ticao, Philippines; Cuming.

Distinguished by the purplish line girding the whorls at their suture.

56.a.

55.

56.b.

57.

58.

59.

60.

61.a.

61.b.

62.

Sowerby, del. et lith.

Vincent Brooks, Imp.

CERITHIUM.

PLATE IX.

Species 55. (Mus. Cuming.)

CERITHIUM ERIENSE. *Cerith. testâ elongatâ, angustâ, fusco-nigrescente, anfractibus numerosis, triseriatim tuberculatis, suturâ excavatâ, aperturâ ovali, canali brevi, aperto, labro crenato.*

THE ERIE CERITHIUM. Shell elongated, narrow, blackish-brown, whorls numerous, tuberculated in three rows, suture excavated, aperture oval, canal short, open, outer lip crenulated.

VALENCIENNES.

Hab. Honduras Bay.

A tall dark-brown shell, very regularly tuberculated in three rows on each upper whorl.

Species 56. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM DORSUOSUM. *Cerith. testâ brevi, acuminatâ, apice incurvâ, dorso in tumorem magnum elevato, albâ, maculis magnis irregularibus variegatâ, aperturâ parvâ, posticè canaliferâ, columellâ brevi, posticè callosâ, labro incrassato, albo, intus lævigato.*

THE HUNCHBACK CERITHIUM. Shell short, acuminated, with the apex bent inwards and the back elevated into a large hump, white, variegated with large irregular blackish spots, aperture small, with a canal at the back, columella short, callous at the back, outer lip thick, white, smooth within.

A. ADAMS, Sowerby's Thes. Conch. Cerithium sp. 78.

Hab. Misamis, island of Mindanao, Philippines; Cuming.

This and the following species are remarkable for the tumour-like elevation at the back of the two last whorls.

Species 57. (Mus. Cuming.)

CERITHIUM ADUNCUM. *Cerith. testâ brevi, acuminatâ, apice incurvâ, dorso in tumorem elevato, spiraliter striatâ, griseâ, lineis nigrescentibus cinctâ, aperturâ parvâ, posticè canaliferâ, columellâ brevi, posticè callosâ, labro incrassato, albo, intus crenulato.*

THE CROOK-BACK CERITHIUM. Shell short, acuminated, with apex bent inwards and the back elevated into a large tumour, spirally striated, grey, with blackish lines, aperture small, with a canal at the back, columella short, callous at the back, outer lip thick, white, crenulated within.

GOULD, Otia Conchologica.

Hab. Island of Mindanao, Philippines; Cuming.

Differing from *C. dorsuosum* only in the ridges of the outer lip, which in that species is smooth.

Species 58. (Mus. Cuming.)

CERITHIUM NIGRO-FASCIATUM. *Cerith. testâ brevi, crassâ, subventricosâ, albâ, fasciis nigris latis cinctâ, spiraliter striatâ, tuberculis magnis in seriebus tribus armatâ, aperturâ albâ, canali breviusculo, labro crenulato.*

THE BLACK-BANDED CERITHIUM. Shell short, thick, rather ventricose, white, girt with wide black bands, spirally striated, armed with large tubercles in three rows, aperture white, canal rather short, outer lip crenulated.

SOWERBY, MS.

Hab. Philippines; Cuming.

Possibly not distinct from *C. bifasciatum*, but the black bands are broader, covering three rows of tubercles.

Species 59. (Mus. Cuming.)

CERITHIUM CARBONARIUM. *Cerith. testâ brevi, albidâ anfractibus paucis, tuberculis nigris ovatis in seriebus tribus (ultimo quinque) dispositis, aperturâ nigro-fasciatâ, columellâ brevissimâ, canali brevissimo, aperto.*

THE COLLIER'S CERITHIUM. Shell short, rather white, whorls few, with black oval tubercles in three rows (five appear in the last), aperture banded with black, columella very short, canal very short, open.

PHILIPPI.

Hab. Island of Panay, Philippines; Cuming.

Species 60. (Mus. Cuming.)

CERITHIUM INFLATUM. *Cerith. testâ brevissimâ, ventricosissimâ, nigrâ, aperturâ et varicibus albis, spiraliter striatâ, rugosâ, longitudinaliter plicatâ, plicis noduliferis, aperturâ magnâ, canali breviusculo, labro intus lirato.*

THE INFLATED CERITHIUM. Shell very short, very ven-

tricose, black, with varices and aperture white, spirally striated, rough, longitudinally plaited, plaits tuberculated, aperture large, canal rather short, outer lip ridged.

Quoy, Voy. Astro. t. 3. p. 130. pl. 55. f. 10.

Hab. Africa.

This darkly coloured, roughly tuberculated species is so short and ventricose, that it would hardly be taken for a *Cerithium*, although possessing all the essential characters of the genus.

Species 61. (Fig. *a*, *b*, Mus. Cuming.)

Cerithium circinatum. *Cerith. testâ brevi, nigrâ, spiraliter sulcis filiformibus albis cinctâ, inter sulcos subnodosâ, longitudinaliter plicatâ, plicis paucis, magnis, crassis, rotundis, aperturâ rotundâ, canali brevissimo.*

The girdled Cerithium. Shell short, black, spirally girt with filiform white grooves, between the grooves rather nodose, longitudinally plicated, plaits few, thick, large, rounded, aperture rounded, canal very short.

A. Adams, MS.

Hab. Island of Mindanao, Philippines; Cuming.

The filiform grooves, and the nodulous black bands between, give a brickwork appearance to the surface of this interesting little shell.

Species 62. (Mus. Cuming.)

Cerithium obesum. *Cerith. testâ brevissimâ, ventricosâ, griseâ, nigrescente, anfractibus paucis, margine albo-fasciatis, lineis interruptis et punctis nigris notatis, aperturâ intus nigro-fasciatâ, columellâ brevissimâ, canali brevi, aperto.*

The fat Cerithium. Shell very short, ventricose, grey, tending to black, whorls few, banded with white at the margin, marked with spots and interrupted lines, aperture black-banded within, columella very short, canal short, open.

Sowerby, Thes. Conch. Cerithium sp. 79.

Hab. Isle of Bohol, Philippines; Cuming.

Not very unlike *C. dorsuosum*, but without the peculiar dorsal protuberance of that shell.

63.

64.a.

64.b.

65.

66.

67.

68.

69.a.

69.b.

70.

Sowerby, del et lith.

Vincent Brooks, Imp.

CERITHIUM.

PLATE X.

Species 63. (Mus. Cuming.)

CERITHIUM ALGICOLA. *Cerith. testâ pyramidatâ, striatâ, albâ, fulvo variegatâ, longitudinaliter plicatâ, plicis frequentibus, medio angulatis, anfractibus numerosis, medio angulatis, aperturâ subrotundâ, columellâ anticè rectiusculâ, canali brevi, subrecurvo, labro crenulato.*

THE SEAWEED CERITHIUM. Shell tapering, striated, white, variegated with fulvous, longitudinally plicated, the plicæ numerous, angular in the centre, whorls numerous, angular in the middle, aperture rather rounded, columella rather straight at the base, canal short, recurved, outer lip crenulated.

C. B. ADAMS.

Cerithium eburneum, var., Sowerby.

Hab. Jamaica.

Species 64. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM INVAGINATUM. *Cerith. testâ turritâ, subcylindraceâ, albâ, apice atrato, spiraliter striatâ, anfractibus suprà inflatis, subangulatis, infrà contractis, pliciferis, inter plicas foveolatis, ultimo anfractu costâ scabrâ duplicatâ, prope basin cinctâ, aperturâ oblongâ, canali elongato.*

THE SHEATHED CERITHIUM. Shell turreted, rather cylindrical, white, with black apex, spirally striated, whorls swelled above, slightly angular, contracted below, plicated, with hollows between the plicæ, the last whorl girt near the base with a roughened duplicate rib, aperture oblong, canal long.

GOULD, Otia Conchologica, p. 61.

Hab. Feejee Islands.

This interesting species is distinguished by the peculiar contraction of the lower part of the whorls, which are deeply pitted between the plaits.

Species 65. (Mus. Cuming.)

CERITHIUM SALEBROSUM. *Cerith. testâ elongatâ, angustâ, albidâ, fasciâ fulvâ cinctâ, longitudinaliter pliciferâ, plicis tuberculatis, prope suturam angulatis, aperturâ ovali, posticè canaliculatâ, columellâ productâ, recurvâ, canali aperto, labro laqueato.*

THE ROUGHENED CERITHIUM. Shell elongated, narrow, white, girt with a fulvous band, longitudinally plaited, plaits tuberculated, near the suture angulated, aperture oval, canaliculated posteriorly, columella produced, recurved, canal open, outer lip fluted.

SOWERBY, Thes. Conch. Cerithium sp. 55.

Hab. Lord Hood's Island.

A long, narrow, irregularly varicose species, with rather recurved, lengthened canal.

Species 66. (Mus. Cuming.)

CERITHIUM TESSELLATUM. *Cerith. testâ brevi, ventricosâ, minutè regulariter tuberculatâ, albâ, anfractibus infrà maculis rubris parvis, quadratis, seriatim dispositis cinctis, ultimo rotundo, aperturâ rotundâ, posticè canaliculatâ, columellâ rectâ, canali breviusculo, labro incrassato, rotundo, crenulato.*

THE TESSELLATED CERITHIUM. Shell short, ventricose, minutely regularly tuberculated, white, whorls below small, with reddish-brown small square rows of spots, the last rounded, aperture round, posteriorly canaliculated, columella straight, canal rather short, outer lip thick, round, crenated.

SOWERBY, Thes. Conch. Cerithium sp. 77.

Hab. Darnley's Island, Australia; Jukes.

This shell is marked with little square reddish spots on the lower part of the whorls, giving them a tessellated appearance. It has a minutely granulated sculpture.

Species 67. (Mus. Cuming.)

CERITHIUM MUSCARUM. *Cerith. testâ pyramidatâ, albâ, longitudinaliter pliciferâ, inter plicas lineis elevatis rubro-punctatis cinctâ, anfractibus subventricosis, suturâ excavatâ, aperturâ rotundâ, canali elongato, labro laqueato.*

THE FLY-SPOTTED CERITHIUM. Shell tapering, white, longitudinally ribbed, between the ribs girt with raised red-spotted lines, whorls rather ventricose, suture excavated, aperture round, canal long, outer lip fluted.

SAY, American Conchology, pl. 59. f. 2.

Hab. Lord Hood's Island; Cuming.

A very pretty little species, characterized by neat little red punctures on the spiral ribs, between the plaits.

Species 68. (Mus. Cuming.)

CERITHIUM NOVÆ-HIBERNIÆ. *Cerith. testâ elongatâ, albâ, minutè striatâ, anfractibus medio angulatis, longitudinaliter distanter plicatis, plicis magnis nodosis, medio angulatis, ultimo anfractu biseriatim noduliferis, aperturâ subquadratâ, columellâ brevi, canali brevissimo, aperto, labro intus crenato.*

THE NEW-IRELAND CERITHIUM. Shell elongated, white, minutely striated, whorls angulated in the centre, longitudinally distantly-plicated, the plaits large, tuberculated, angulated in the middle, aperture rather square, columella short, canal very short, open, outer lip crenulated within.

A. ADAMS, Sowerby's Thes. Conch. Cerithium sp. 33.

Hab. Florida.

A white species, with large angular tubes.

Species 69. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM MUNITUM. *Cerith. testâ pyramidatâ, albâ, varicosâ, anfractibus numerosis, medio angulatis, longitudinaliter pliciferis, spiraliter costis nodosis validis cinctis, ultimo infrà costis duabus ad plicas in tuberculis magnis productis, aperturâ subrotundâ, columellâ rectiusculâ, canali brevi, labro acutè laqueato.*

THE FORTIFIED CERITHIUM. Shell tapering, white, varicose, whorls numerous, angular in the middle, longitudinally plicated, spirally circled with strong tuberculated ribs, the last with two ribs produced on the plicæ into large tubercles, aperture rather rounded, columella rather straight, canal short, outer lip sharply fluted.

PHILIPPI, Enum. Moll. Sicil.

Hab. Mediterranean.

A species of pyramidal form, distinguished by two large ribs encircling the last whorl, which are produced on the plaits into large angular tubercles.

Species 70. (Mus. Cuming.)

CERITHIUM GEMMA. *Cerith. testâ oblongâ, spiraliter striatâ, albidâ, anfractibus subventricosis, tuberculis in seriebus tribus instructis, maculis nigrescentibus super tubercula duobus alternis pictis, aperturâ brevi, ovatâ, columellâ rectiusculâ, canali brevi, labro crenato, incrassato.*

THE GEM CERITHIUM. Shell oblong, spirally striated, whitish, with whorls a little ventricose, set with tubercles in three rows, with black spots painted on them in alternate twos, aperture short, oval, columella rather straight, canal short, inner lip thick.

SOWERBY, Thes. Conch. Cerithium sp. 105.

Hab. Island of Luzon, Philippines.

The regularly set tubercles present a gem-like appearance, and are neatly painted with dark-brown in alternate couples.

71.a.

72.a.

72.b.

71.b.

73.

74.

75.

76.a.

76.b.

77.

CERITHIUM.

PLATE XI.

Species 71. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM TENELLUM. *Cerith. testâ tenui, subdiaphanâ, albâ vel roseâ, nonnunquam maculis castaneis parvis seriatim pictâ, varicibus albis, anfractibus supra medium angulatis, supra angulum excavatis, ad angulum et suturam tuberculatis, aperturâ parvâ, canali brevi, aperto, labro simplice.*

THE DELICATE CERITHIUM. Shell thin, nearly transparent, white or rose, sometimes painted with rows of small chestnut spots, varices white, whorls angulated above the middle, excavated above the angle, tuberculated on the angle and at the suture, aperture small, canal short, open, outer lip simple,

SOWERBY, Thes. Conch. Cerithium sp. 34.

Hab. Philippines; Cuming.

There is a lightness and transparency in the variously coloured shells of this species that, with other characters, distinguish them at first sight.

Species 72. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM BALTEATUM. *Cerith. testâ turritâ, acuminatâ, albâ, lineâ rubrâ vel fasciâ luteâ spiraliter cinctâ, varicibus frequentibus, albis, anfractibus longitudinaliter plicatis, tuberculatis, supernè tumidis, prope suturam subcontractis, ultimo validè bicostatâ, infra costas attenuatâ, aperturâ subquadratâ, canali producto, subaperto.*

THE BELTED CERITHIUM. Shell turreted, acuminated, white, spirally encircled by a red line or yellow band, varices numerous, white, whorls longitudinally ribbed, tuberculated, swelled above, narrowed near the suture, the last with two strong ribs, narrowed below the ribs, aperture rather square, canal produced, rather open.

PHILIPPI, Abbildungen, t. 1. f. 10.

Hab. Philippines; Cuming.

The last whorl terminates below in a couple of ribs, beneath which the lower part of the shell is narrowed so as to form a kind of rostrum.

Species 73. (Mus. Cuming.)

CERITHIUM GRANOSUM. *Cerith. testâ griseo-nigrescente, pyramidatâ, acuminatâ, spiraliter striatâ, anfractibus rectiusculis, costis spiralibus tuberculiferis tribus (anfractu ultimo pluribus) cinctis, tuberculis albo-punctatis, anfractu ultimo producto, ovali, aperturâ ovali, subexpansâ, canali producto, aperto.*

THE GRANULAR CERITHIUM. Shell blackish-grey, tapering, acuminated, spirally striated, whorls rather straight, girt with three (more in the last whorl) spiral tuberculated ribs, tubercles white-spotted, last whorl produced, oval, aperture oval, rather expanded, canal produced, rather open.

KIENER, Sp. de Coq. Cerithium, pl. 4. f. 3.

Hab. Australia.

The tubercles are not so sharp and narrow in this species as in *C. robur*, and the canal shorter and more open.

Species 74. (Mus. Cuming.)

CERITHIUM MITRÆFORME. *Cerith. testâ pyramidatâ, fusco-nigrescente, varicibus albis, prope suturam spiraliter albo fasciatâ, anfractibus rectiusculis, longitudinaliter plicatis, in seriebus tribus (supremâ duplicatâ) tuberculatis, tuberculis parvis, rotundis, albis, ultimo anfractu versus basin elongato, angustato, apertura ovali, canali producto, labro lineis albis radiato.*

THE MITRE CERITHIUM. Shell tapering, blackish-brown, with white varices, spirally banded with white near the suture, whorls rather straight, longitudinally plicated, tuberculated in three rows, the uppermost double, tubercles small, white, round, last whorl towards the lower part long and narrow, aperture oval, canal produced, open.

SOWERBY, Thes. Conch. Cerithium sp. 104.

Hab. —— ?

In this species the last whorl is obliquely contracted.

Species 75. (Mus. Cuming.)

CERITHIUM RUBUS. *Cerith. testâ elongatâ, pyramidatâ, varicosâ, fusco-purpurascente, varicibus frequentibus, tumidis, anfractibus numerosis, spiraliter striatis, longitudinaliter plicatis, costis tribus (ultimo anfractu septem) ad plicas frequentes tuberculiferis cinctis, aperturâ ovali, canali longiusculo, subrecurvo, labro laqueato.*

THE BRAMBLE CERITHIUM. Shell long, tapering, varicose, purplish-brown, with numerous thick varices, whorls numerous, spirally striated, longitudinally plaited, girt with three (last whorl seven) ribs, tuberculated on the numerous plaits, aperture oval, canal rather long and recurved, outer lip fluted.

MARTYN, Universal Conchology, pl. 28.

Murex serratus, Wood.

Hab. —— ?

A stout, darkly-coloured shell, with sharp, narrow tubercles in rows.

Species 76. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM EXIMIUM. *Cerith. testâ elongatâ, eleganter pyramidatâ, medio subventricosâ, pallidissimè rufâ, ad canalem aurantiâ, longitudinaliter frequenter plicatâ, plicis arcuatis, minutè tuberculatis, anfractibus numerosis, suturâ validè excavatâ, aperturâ subquadratâ, canali longiusculo, labro crenulato.*

THE CHOICE CERITHIUM. Shell long, elegantly tapering, a little swelled in the middle, very pale-brown, tinged with orange on the canal, many-plaited longitudinally, plaits curved, minutely tuberculated, whorls numerous, suture deeply excavated, aperture rather square, canal rather long, outer lip crenulated.

SOWERBY, Thes. Conch. Cerithium sp. 103.

Hab. Ceylon; Layard.

This little species is beautifully formed and finely sculptured, the excavated suture of the whorls showing their shape.

Species 77. (Mus. Cuming.)

CERITHIUM LENTIGINOSUM. *Cerith. testâ parvâ, albâ, maculis punctisque rubris variegatâ, pyramidatâ, acuminatâ, anfractibus validè angulatis, spiraliter striatis, inter strias moniliformibus, ad angulum acutè tuberculatis, aperturâ parvâ, canali brevi, aperto, labro subexpanso, lineato.*

THE FRECKLED CERITHIUM. Shell small, white, variegated with reddish spots and dots, tapering, acuminated, whorls strongly angulated, spirally striated, between the striæ beaded, with sharp tubercles at the angles, aperture rather square, canal rather produced, outer lip crenulated.

SOWERBY.

Hab. —— ?

A small shell, minutely variegated with reddish-brown markings, with strongly angulated whorls, otherwise somewhat resembling *C. eburneum*.

78.a.

78.b.

79.

80.

81.a.

81.b.

82.

83.a.

83.b.

84.

Sowerby, del. et lith.

Vincent Brooks, Imp.

CERITHIUM.

PLATE XII.

Species 78. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM DUBIUM. *Cerith. testâ brevi, latâ, pyramidatâ, fulvâ, anfractibus angulatis, ventricosis, ad angulum pliciferis, infrà ad suturam lineâ tuberculatâ, inter tuberculis rubro-maculatâ cinctis, anfractu ultimo subquadrato, aperturâ subquadratâ, columellâ arcuatâ, canali brevi, aperto.*

THE DOUBTFUL CERITHIUM. Shell short, wide, pyramidal, fulvous, whorls angulated, ventricose, plaited at the angle, girt beneath at the suture with a tuberculated line, red-spotted between the tubercles, last whorl rather square, aperture rather square, columella rather arched, canal short, open.

SOWERBY, Thes. Conch. Cerithium sp. 62.

Hab. Van Diemen's Land.

Although the specimen represented by figure *b* is much broader than the other, which is the original type, it can scarcely be doubted that both shells belong to one species.

Species 79. (Mus. Cuming.)

CERITHIUM PLANUM. *Cerith. testâ turritâ, angustiusculâ, albâ, spiraliter castaneo fasciatâ, striatâ, apice livido, anfractibus rectis, planis, prope suturam angulatis, longitudinaliter plicatis, plicis distantibus, tuberculiferis, anfractu ultimo subquadrato, infrà costâ acutâ cincto, ad basin angustato, aperturâ quadratâ, canali producto, recto, subclauso.*

THE FLAT-SIDED CERITHIUM. Shell turreted, rather narrow, white, spirally banded with chestnut, striated, the apex livid, whorls straight, flat, angulated near the suture, longitudinally plaited, plaits distant, tuberculated, the last whorl rather square, girt with a sharp rib below, narrowed at the base, aperture rather square, canal produced, straight, nearly closed.

ANTON, Philippi, Abbildungen.

Hab. Philippines; Cuming.

The flattened sides, and the abrupt termination of the last whorl, give a cylindrical, truncated appearance to this species.

Species 80. (Mus. Cuming.)

CERITHIUM VERSICOLOR. *Cerith. testâ angustâ, varicosâ, albâ, fusco variegatâ, spiraliter striatâ, tuberculis nigrescentibus, distinctis, rotundis, lævibus munitâ, anfractibus subventricosis, numerosis, suturâ excavatâ, aperturâ ovali, columellâ breviusculâ, canali brevi, angusto.*

THE CHANGEABLE CERITHIUM. Shell narrow, varicose, white, variegated with brown, spirally striated, provided with dark rounded smooth distinct tubercles, whorls rather ventricose, numerous, suture excavated, aperture oval, columella rather short, canal short, narrow.

C. B. ADAMS, Contributions to Conchology, vol. i.

Hab. Jamaica.

A rather narrow shell, painted brown on the tubercles.

Species 81. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM PIPERITUM. *Cerith. testâ irregulariter pyramidatâ, albâ, spiraliter costatâ, costis intermediis majoribus castaneo-punctatis, anfractibus angulatis, ultimo rotundo, aperturâ rotundâ, productâ, columellâ rectâ, canali brevi, angusto, labro rotundo.*

THE PEPPERED CERITHIUM. Shell irregularly pyramidal, white, spirally ribbed, the intermediate ribs larger and spotted with chestnut, whorls angular, the last rounded, aperture round, produced, columella straight, canal short, narrow, outer lip rounded.

SOWERBY, Thes. Conch. Cerithium sp. 76.

C. punctatum, Bruguière.

Hab. Senegal; Lamarck. Philippines; Cuming.

The surface of this pretty little shell is grooved between narrow, rounded ribs, which are alternately marked with neat spots.

Species 82. (Mus. Cuming.)

CERITHIUM FILOSUM. *Cerith. testâ pyramidatâ, subventricosâ, albâ, lineis rubris inter costas cinctâ, spiraliter minutissimè striatâ, anfractibus subventricosis, longitudinaliter plicatis, spiraliter seriebus tuberculorum tribus cinctâ, supernè serie parvâ intermediâ, tuberculis magnis, rotundis, interstitiis angustis, aperturâ ovali, canali brevi, labro laqueato.*

THE THREADED CERITHIUM. Shell tapering, rather ventricose, white, girt with red lines between the ribs,

spirally very finely striated, whorls rather ventricose, longitudinally plaited, spirally girt with three rows of tubercles and one smaller intermediate row, tubercles large, round, interstices narrow, aperture oval, canal short, outer lip fluted.

SOWERBY.

Hab. Island of Bureas, Philippines; Cuming.

A very delicate thread-like line runs between the tubercles on several of the cross-ribs.

Species 83. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM NASSOIDES. *Cerith. testâ brevi, parvâ, ventricosâ, albâ, ad suturam inter plicas et ad marginem aperturæ maculis castaneis concinnis pictâ, anfractibus paucis, angulatis, supernè plicatis, plicis lævigatis ad angulum angulatis, anfractu ultimo compresso, aperturâ parvâ, canali brevi, aperto, labro maculato, crasso, subrotundo.*

THE NASSA-LIKE CERITHIUM. Shell short, small, ventricose, white, painted at the margin of the aperture and at the suture between the plaits with neat chestnut markings, whorls few, angular, plaited at the upper part, plaits smooth, angular at the angle of the whorls, the last whorl compressed, aperture small, canal short, open, outer lip spotted, thick.

SOWERBY, Thes. Conch. Cerithium sp. 114.

Hab. Sandwich Islands; Dr. Newcombe.

The peculiarities of this pretty little shell are the neat markings on each whorl, near the suture, and the depression of the last whorl.

Species 84. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM PUPA. *Cerith. testâ brevi, ventricosâ, pupæformi, albâ, prope suturam et infra medium fulvo fasciatâ, spiraliter striatâ, longitudinaliter plicatâ, plicis distantibus, arcuatis, in seriebus tribus tuberculiferis, tuberculis acutis, anfractibus ventricosis, medianis inflatis, ultimo paulo contracto, aperturâ parvâ, columellâ brevi, canali brevi, obliquo, aperto.*

THE PUPA CERITHIUM. Shell short, ventricose, chrysalis-shaped, white, with two fulvous bands, one at the suture, the other below the middle, spirally striated, longitudinally plaited, plaits distant, arched, tuberculated in three series, tubercles sharp, whorls ventricose, the middle ones inflated, the last a little contracted, aperture small, columella short, canal short, oblique, open.

SOWERBY.

Hab. Island of Capul, Philippines; Cuming.

85.a.

86.a.

86.b.

85.b.

87.

88.

89.

90.a.

90.b.

91.

CERITHIUM.

PLATE XIII.

Species 85. (Fig, *a*, *b*, Mus. Cuming.)

CERITHIUM LACTEUM. *Cerith. testâ angustâ, subcylindraceâ, elongatâ, lævisculâ, spiraliter sulcatâ, albâ, prope suturam crenulatâ, nonnunquam inter crenulas rubro maculato, aperturâ rotundâ, parvâ, columellâ brevi, canali brevissimo, aperto, labro simplice.*

THE MILK-WHITE CERITHIUM. Shell narrow, subcylindrical, elongated, rather smooth, spirally grooved, white, crenulated near the suture, sometimes spotted with red between the crenulations, aperture round, small, columella short, canal very short, open, outer lip simple.

KIENER, Sp. Conch. pl. 7. f. 3.

Hab. Island of Ticao, Philippines; Cuming.

This narrow, cylindrical, white shell is slightly crenuated below the suture of each whorl.

Species 86. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM BERMUDÆ. *Cerith. testâ parvâ, brevi, albâ, maculis irregularibus castaneis variegatâ, tuberculis parvis albis rotundis seriatim cinctâ, aperturâ ovali, subexpansâ, canali brevi, aperto.*

THE BERMUDA CERITHIUM. Shell small, short, white, variegated with irregular chestnut spots and patches, girt with small white round tubercles in rows, aperture oval, rather expanded, canal short, open.

SOWERBY.

Hab. Bermuda.

A very curiously variegated little shell, with regularly placed tubercles.

Species 87. (Mus. Cuming.)

CERITHIUM SORDIDULUM. *Cerith. testâ pyramidatâ, elongatâ, acuminatâ, spiraliter striatâ, anfractibus frequentibus, subventricosis, distanter plicatis, spiraliter tricostatis, costis ad plicas acutè tuberculatis, suturâ excavatâ, anfractu ultimo infrà rotundato, aperturâ ovali, columellâ rectâ, canali breviusculo, aperto.*

THE SORDID CERITHIUM. Shell tapering, elongated, acuminated, spirally striated, whorls numerous, rather ventricose, distantly plicated, spirally three-ribbed, ribs sharply tuberculated at the plaits, suture excavated, the last whorl rounded below, aperture oval, columella straight, canal rather short, open.

GOULD, Otia Conchologica, p. 61.

Hab. —— ?

The plaits in this white shell are very sharply tuberculated.

Species 88. (Mus. Cuming.)

CERITHIUM TURRITUM. *Cerith. testâ pyramidatâ, elongatâ, acuminatâ, spiraliter striatâ, anfractibus brevibus, rectiusculis, distanter plicatis, spiraliter tricostatis, costis ad plicas obtusè tuberculatis, suturâ excavatâ, ultimo subquadrato, infrà spiraliter costâ moniliferâ cincto, aperturâ subquadratâ, columellâ rectâ, canali producto, labro subexpanso.*

THE TURRETED CERITHIUM. Shell tapering, elongated acuminated, spirally striated, whorls short, rather straight, distantly plaited, spirally three-ribbed, ribs obtusely tuberculated on the plaits, suture excavated, the last rather square, girt below with a beaded rib, aperture rather square, columella straight, canal produced, outer lip expanded.

SOWERBY, Thes. Conch. Cerithium sp. 47.

Hab. Island of Burcas, Philippines; Cuming.

Species 89. (Mus. Cuming.)

CERITHIUM ADENENSE. *Cerith. testâ elongatâ, angustâ, albâ, sparsim rubro pictâ, anfractibus subventricosis, longitudinaliter distanter plicatis, ad suturam tumidis, tuberculatis, tum excavatis, medio et infrà bicostatis, interstitiis foveolatis, costis ad plicas acutè tuberculatis, aperturâ parvâ, orali, canali producto.*

THE ADEN CERITHIUM. Shell elongated, narrow, white, painted sparingly with reddish-brown, whorls rather ventricose, longitudinally distantly plaited, tumid and tuberculated at the suture, then excavated, girt with two ribs at and below the middle, ribs sharply tuberculated at the plaits, aperture small, oval, canal produced.

SOWERBY.

Hab. Aden.

This species is characterized by deeply pitted interstices between the ribs and rather sharp tubercles.

Species 90. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM SIPHONATUM. *Cerith. testâ brevi, rugosâ, albâ, varicosâ, anfractibus subangulatis, spiraliter striatis, plicatis, ultimo brevi, infrà spiraliter bicostato, aperturâ parvâ, canali longicaudato, recurvo.*

THE SIPHONED CERITHIUM. Shell short, rough, white, varicose, whorls rather angular, spirally striated, plaited, the last short spirally double-ribbed below, aperture small, canal long, recurved.

SOWERBY.

Hab. ——?

This is a very curiously sculptured and shaped white species, with a very long upturned canal.

Species 91. (Mus. Cuming.)

CERITHIUM VARIABILE. *Cerith. testâ parvâ, breviusculâ, griseâ, nigro-tuberculatâ, anfractibus subventricosis, tuberculis nigris ovalis in seriebus tribus (ultimo quinque) cinctis, interstitiis minutè tuberculatis anfractu ultimo subovali, aperturâ breviusculâ, canali brevi, aperto.*

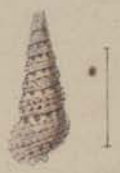
THE VARIABLE CERITHIUM. Shell small, rather short, grey, with black tubercles, whorls rather ventricose, girt with three (the last with five) rows of black oval tubercles, interstices minutely tuberculated, last whorl rather oval, aperturer ather short, canal short, open.

C. B. ADAMS.

Hab. ——?

92.

93. a.



93. b.

94.

95. a.

95. b.

96.

97. a.

97. b.

98.

CERITHIUM.

PLATE XIV.

Species 92.

CERITHIUM FERRUGINEUM. *Cerith. testâ parvâ, breviusculâ, subpupæformi, fuscâ, longitudinaliter plicatâ; anfractibus paucis, seriebus tribus tuberculorum cinctis, tuberculis ovalibus nigrescentibus; aperturâ subovali, labro incrassato, intus crenato, columellâ brevissimâ, canali brevi, aperto.*

THE RUSTY CERITHIUM. Shell small, rather short, rather pupæform, brown, longitudinally plicated; whorls few, encircled by three rows of tubercles, tubercles oval, blackish; aperture rather oval, outer lip thickened, crenulated within, columella very short, canal short, open.

SAY, Amer. Conch. pl. 49. f. 9.

Cerithium variabile, C. B. Adams?

Cerithium versicolor, C. B. Adams?

Hab. Jamaica.

This species includes many varieties in colouring, among which the dark-brown one figured is the most prevalent.

Species 93.

CERITHIUM INTERSTRIATUM. *Cerith. testâ oblongâ, subcylindraceâ, albidâ, fulvo pallidè variegatâ, alternatim costulis granosis, et lineis elevatis lævibus, spiraliter cinctâ; anfractibus rectiusculis; aperturâ parvâ, subquadratâ, labro expanso, extus laqueato, columellâ rectiusculâ, canali brevi.*

THE INTERSTRIATED CERITHIUM. Shell oblong, rather cylindrical, whitish, variegated with pale yellowish-brown, spirally girt with small granular ribs, alternating with elevated smooth lines; whorls rather straight; aperture small, rather square, outer lip expanded, fluted outside, columella rather straight, canal short.

SOWERBY, Thes. Conch. Cerithium, sp. 122. f. 216.

Hab. —— ?

This pretty little specimen is very remarkable in its sculpture, which consists of alternate rows of beads, and threadlike smooth lines.

Species 94.

CERITHIUM CLAVIS. *Cerith. testâ elongatâ, subcylindraceâ, albâ, fulvo pallidissimè fasciatim suffusâ; anfractibus numerosis, rectiusculis, seriebus tribus tuberculorum cinctis, tuberculis acutis, magnis; aperturâ parvâ, labro validè expanso, extus laqueato, columellâ elongatâ, rectiusculâ.*

THE KEY CERITHIUM. Shell long, subcylindrical, white, suffused with very plain brown; whorls numerous, rather straight, girt with three rows of sharp, large tubercles; aperture small, outer lip much expanded, fluted outside, columella elongated, rather straight.

SOWERBY.

Hab. —— ?

At first sight this shell resembles the *C. interstriatum* (Sp. 93), having a rather similar clavate form, resulting from the expansion of the outer lip; but the sculpture consists of three rows of large, sharp tubercles.

Species 95.

CERITHIUM ROSTRATUM. *Cerith. testâ eleganter pyramidatâ, tenui, albâ, longitudinaliter plicatâ, spiraliter costatâ, inter costas lineatim punctatâ, irregulariter varicosâ; anfractibus numerosis, plicis longitudinalibus subrotundis; aperturâ subovali, labro expanso, extus laqueato, canali elongato, recurvo, angusto, plerumque nigrescente.*

THE BEAKED CERITHIUM. Shell elegantly pyramidal, thin, white, longitudinally plicated, spirally ribbed, between the ribs spotted in lines, irregularly varicose; whorls numerous, longitudinal, plaits rather round; aperture rather oval, outer lip expanded, fluted without, canal elongated, recurved, narrow, generally tipped with black.

SOWERBY, Thes. Conch. Cerithium, sp. 50. f. 104.

Cerithium gracile, Pease.

Hab. Philippines, Cuming. Sandwich Islands, Pease.

This elegantly-tapering shell is remarkable for the produced, straight-truncated canal, which, in most specimens, is tipped with black.

Species 96.

CERITHIUM ASPERUM. *Cerith. testâ pyramidatâ, acuminatâ, fuscâ, longitudinaliter plicatâ, lineis castaneis noduliferis regulariter cinctâ, inter lineas minutè striatâ; anfractibus novem, ultimis subangulatis, nodulis acutis; aperturâ breviusculâ, labro crasso, crenulato, canali brevi, aperto.*

THE ROUGHENED CERITHIUM. Shell pyramidal, acuminated, brown, longitudinally plicated, regularly girt with chestnut noduliferous lines, between the lines minutely striated; whorls nine, the last rather angulated, nodules sharp; aperture rather short, outer lip thick, crenulated, canal short, open.

PEASE, Pro. Zool. Soc.

Hab. Sandwich Islands.

The colour of this pretty little species is pale-brown, and the lines of tubercles are defined by their dark-chestnut colour.

Species 97.

CERITHIUM MACULOSUM. *Cerith. testâ brevi, ovali, longitudinaliter plicatâ, albâ, punctis fuscis minutis sparsâ, ad suturam inter nodulos maculatâ; anfractibus quinque ad suturam crenatis, supra medium angulatis, ad angulum plicatis, plicis magnis, distantibus; anfractu ultimo striato; aperturâ subovali, labro incrassato, lineatim maculato, canali brevissimo, lineari.*

THE SPOTTED CERITHIUM. Shell short, oval, longitudinally plicated, white, sprinkled with minute brown spots, spotted at the suture between the nodules; whorls five, crenated at the suture, angulated above the middle, plicated at the angle, plaits large and distant, the last whorl striated; aperture rather oval, outer lip thickened, linearly spotted, canal very short, linear.

MIGHAELS.

Hab. ——?

A narrower shell than *C. nassoides*, with a striated surface.

Species 98.

CERITHIUM CRASSILABRUM. *Cerith. testâ parvâ, pyramidatâ, scabrâ, albâ, castaneo, sparsim maculatâ et punctatâ; anfractibus octo, costellatis, supra medium angulatis, ad suturam moniliferis, ad angulum et infrà costellis tuberculiferis duabus cum lineis elevatis intermediis cinctis; aperturâ latâ, subrotundâ, columellâ breviusculâ, canali brevi, lineari labro subexpanso, crenulato, punctato.*

THE THICK-LIPPED CERITHIUM. Shell small, pyramidal, scabrous, white, sparingly spotted and dotted with chestnut; whorls eight, ribbed, angulated above the middle, beaded at the suture, girt at and under the angle with two tuberculated ribs and intermediate elevated lines; aperture wide, rather round, columella rather short, canal short, linear, outer lip slightly expanded, crenulated, spotted.

KRAUSS, Ind. Moll. t. vi. f. 10.

Hab. Port Natal.

A small shell, with angular whorls, not unlike some varieties of *C. mediterraneum*, but more delicately sculptured and finely punctured.

99.

100.

101.

102.

103.

104.

105.

106.

107.

108.

CERITHIUM.

PLATE XV.

Species 99. (Mus. Cuming.)

CERITHIUM UNILINEATUM. *Cerith. testâ parvâ, albâ, punctis pallidis aspersâ, ad suturam lineâ unicâ spirali rubro-fuscâ cinctâ, longitudinaliter subcostatâ, spiraliter striatâ, varicibus subfrequentibus; aperturâ parvâ, canali brevissimo.*

THE SINGLE-LINED CERITHIUM. Shell small, white, sprinkled with pale spots, girt at the suture with a single, spiral, red-brown line, longitudinally slightly ribbed, spirally striated, varices rather frequent; aperture small, canal very short.

PEASE.

Hab. Sandwich Islands.

A pretty little white shell, with a dark reddish-brown beaded line at the suture.

Species 100. (Mus. Cuming.)

CERITHIUM IANTHINUM. *Cerith. testâ parvâ, pyramidatâ, albâ, infrà flammulis fuscis pictâ, spiraliter noduloso-striatâ; anfractibus numerosis, supra medium angulatis; aperturâ parvâ, canali brevi.*

THE IANTHINUM CERITHIUM. Shell small, tapering, white, painted beneath with flame-like dashes of brown, spirally girt with nodulous striæ; whorls numerous, angulated above the middle; aperture small, canal short.

GOULD, Otia, p. 63.

Hab. Clermont Tonnerre, U.S.

From Mr. Cuming's specimen of this species, which does not exhibit the smallest trace of purple colour, it is difficult to divine the reason for the name *Ianthinum* being given to it.

Species 101. (Mus. Cuming.)

CERITHIUM EGENUM. *Cerith. testâ pyramidatâ, albâ, spiraliter liratâ, scabrâ; anfractibus numerosis, rectiusculis, suturâ excavatâ; aperturâ paulo expansâ, labro crasso, canali brevi, distincto.*

THE POOR CERITHIUM. Shell pyramidal, white, spirally ridged, scabrous; whorls numerous, rather straight, suture excavated; aperture a little expanded, outer lip thick, canal short, distant.

GOULD, Otia, p. 62.

Hab. Wilson's Island.

Resembling *C. lacteum*, but smaller, and more varicose.

Species 102. (Mus. Cuming.)

CERITHIUM FUCATUM. *Cerith. testâ breviusculâ, conicâ, pallidè fulvâ, anfractibus novem, costis tribus nodulíferis cinctis (ultimo quinque), inter nodulos rufo punctatis, suturâ excavatâ; labro subexpanso, anticè incurvo, columellâ rectiusculâ, canali subclauso.*

THE COLOURED CERITHIUM. Shell rather short, conical, pale-fawn; whorls nine, encircled by three nodulous ribs, between the nodules spotted with red, suture excavated, outer lip rather expanded, curved inwards in front, columella rather straight, canal partly closed.

PEASE.

Hab. Sandwich Islands.

The whorls are ornamented with beaded ridges, delicately spotted between the bends.

Species 103. (Mus. Cuming.)

CERITHIUM RARI-MACULATUM. *Cerith. testâ parvâ, elevatâ, albâ, maculis fuscis raris pictâ, spiraliter striatâ; anfractibus medio subangulatis, tuberculis rotundis magnis ornatis; aperturâ parvâ, canali brevi, labro simplici.*

THE FEW-SPOTTED CERITHIUM. Shell small, elevated, white, painted with a few brown spots, spirally striated; whorls slightly angulated in the middle, ornamented with large rounded tubercles; aperture small, canal short, outer lip simple.

SOWERBY, Thes. Conch. sp. 113. fol. 183. f. 204.

Hab. Island of Zebu, Philippines.

Species 104. (Mus. Cuming.)

CERITHIUM CALIFORNIÆ. *Cerith. testâ brevi, ovali, obtusâ, albâ, maculis quadratis fuscis, irregularibus pictâ,*

spiraliter minutè striatâ; anfractibus brevibus, rectiusculis, triseriatim tuberculiferis; aperturâ subquadratâ, columellâ rectiusculâ, canali brevi.

The Californian Cerithium. Shell short, oval, obtuse, white, painted with dark, square, irregular spots, spirally minutely striated; whorls short, rather straight, with tubercles in three rows; aperture rather square, columella rather straight, canal short.

Sowerby.

Hab. California.

Species 105. (Mus. Cuming.)

Cerithium nivosum. *Cerith. testâ brevi, subventricosâ, albâ, spiraliter striatâ; anfractibus paucis, ventricosis, triseriatim noduliferis; aperturâ expansâ, labro intus subcrenulato, columellâ brevi, canali brevissimo.*

The snowy Cerithium. Shell short, rather ventricose, white, spirally striated; whorls few, ventricose, with nodules in three rows; aperture expanded, outer lip slightly crenulated within, columella short, canal very short.

Sowerby, Thes. Conch. sp. 115. f. 205.

Hab. —— ?

Species 106. (Mus. Cuming.)

Cerithium cælatum. *Cerith. testâ conico-pyramidatâ, pallidâ, anfractibus novem, rectiusculis, tuberculorum seriebus tribus armatis, tuberculis productis, longitudinaliter oblongis, suturâ excavatâ; anfractu ultimo infrà bicostato; aperturâ subovali, canali brevi, aperto.*

The embossed Cerithium. Shell conically pyramidal, pale; whorls nine, rather straight, armed with three rows of tubercles, tubercles prominent, longitudinally oblong, suture excavated; last whorl with two ribs beneath; aperture rather oval, canal short, open.

Gould, Otia, p. 62.

Hab. Tierra del Fuego.

The tubercles, in three spiral rows, are of a peculiar oblong form, and very prominent and regular.

Species 107. (Mus. Cuming.)

Cerithium Rissoide. *Cerith. testâ parvâ, subventricosâ, acuminatâ, albâ; anfractibus paucis, spiraliter striatis, longitudinaliter plicatis, ad suturam supra et infra medium triseriatim tuberculiferis, suturâ subexcavatâ, ultimo anfractu infrà alternatim lirato; aperturâ ovali, labro expanso, intus incrassato, validè plicato, columellâ brevi, canali brevissimo, aperto.*

The Rissoa-like Cerithium. Shell small, rather ventricose, acuminated, white; whorls few, spirally striated, longitudinally plaited, with three rows of tubercles at the suture, and above and below the centre, suture rather hollow; last whorl alternately ridged beneath; aperture oval, outer lip expanded, thickened within, columella short, canal very short, open.

Sowerby.

Hab. Island of St. Thomas, West Indies.

Species 108. (Mus. Cuming.)

Cerithium Thomasiæ. *Cerith. testâ subventricosâ, albâ, sparsim rubro-maculatâ, longitudinaliter plicatâ, plicis tuberculis rotundis, lævibus quatuor armatis, interstitiis spiraliter striatis; anfractu ultimo infrà costato, inter costas minutè lirato; aperturâ subovali, labro expanso, intus incrassato, plicato, canali obliquo, brevi, semiclauso.*

St. Thomas's Cerithium. Shell rather ventricose, white, with a few reddish spots, longitudinally plaited, plaits armed with four round, smooth tubercles, interstices spirally striated; last whorl ribbed beneath, between the ribs minutely striated; aperture rather oval, outer lip expanded, thickened and plaited within, canal oblique, short, partly closed.

Sowerby.

Hab. Island of St. Thomas, West Indies.

109.

110.

111.

112.a.

112.b.

112.c.

113.

114.

115.

116.

Sowerby, del. et lith.

Vincent Brooks, Imp.

CERITHIUM.

PLATE XVI.

Species 109. (Mus. Cuming.)

CERITHIUM ALBO-LIRATUM. *Cerith. testâ minutâ, conicâ, albâ, longitudinaliter plicatâ; anfractibus paucis, subangulatis, supra minutè liratis, infrà prope suturam bicostatis, liris proximis, costis crenatis, subdistantibus, interstitiis foveolatis; aperturâ fusiformi, canali breviusculo, valde aperto.*

THE WHITE-RIDGED CERITHIUM. Shell minute, conical, white, longitudinally plaited; whorls few, rather angular, above minutely ridged, beneath, near the suture, double-ribbed, ridges close, ribs crenated, rather distant, interstices hollow; aperture fusiform, canal rather short, very open.

CARPENTER, Mazatlan Report, sp. 336.

Hab. Mazatlan.

No mature specimens have yet been found of this interesting little species.

Species 110.

CERITHIUM SAYI. *Cerith. testâ parvâ, ovali, nigrescente; anfractibus paucis, subventricosis, longitudinaliter plicatis, spiraliter quadricostatis, costis super plicis tuberculiferis, suturâ excavatâ; ultimo anfractu infrà costato; aperturâ subquadratâ, labro interno, expanso, columellâ subtortuosâ, canali brevissimo, aperto.*

SAY'S CERITHIUM. Shell small, oval, nearly black; whorls few, subventricose, longitudinally plicated, spirally four-ribbed, ribs tuberculated on the plaits, suture hollow; last whorl ribbed beneath; aperture rather square, inner lip expanded, columella rather twisted, canal very short, open.

MENKE.

Cerithium nigrum, Totten.

Hab. North America.

A very small, darkly-coloured shell, with four tuberculated ribs on each whorl.

Species 111. (Mus. Cuming.)

CERITHIUM MUTABILE. *Cerith. testâ parvâ, nigrescente, solidâ, spiraliter sulcatâ, longitudinaliter costatâ, costis distantibus, interstitiis planis; anfractibus rectiusculis, ad suturam unicostatis; aperturâ subtrigonâ, columellâ brevi, obtusâ, labro subincrassato, canali brevi.*

THE CHANGEABLE CERITHIUM. Shell small, nearly black, solid, spirally sulcated, longitudinally ribbed, ribs distant, interstices flat; whorls rather straight, with a rib at the suture; aperture rather triangular, columella short, obtuse, outer lip rather thickened, canal short.

C. B. ADAMS.

Hab. West Indies.

Only one variety of this shell appears in Mr. Cuming's collection.

Species 112. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM DELECTUM. *Cerith. testâ parvâ, gracili, minutè seriatim granulatâ, violaceâ seu roseâ, seu albâ minutè punctatâ, varicibus validis, albis; anfractibus medianis paulo inflatis, apice numerato; aperturâ parvâ, columellâ obtusâ, brevi, canali aperto.*

THE CHOSEN CERITHIUM. Shell small, thin, minutely granulated in rows, violet or pink, or white with minute dots, varices thick, white; middle whorls slightly inflated, apex sharp; aperture small, columella obtuse, short, canal open.

A. ADAMS.

Hab. Gallapagos Islands.

Species 113. (Mus. Cuming.)

CERITHIUM LUTOSUM. *Cerith. testâ brevi, nigrescente, longitudinaliter plicatâ; anfractibus paucis, subventricosis, seriebus tribus tuberculorum armatis, inter tubercula liris elevatis cinctis; ultimo anfractu infrà alternatim costato et lirato; aperturâ subquadratâ, columellâ latâ, laminatâ, labro intus incrassato, subcrenulato, canali obliquo, brevi.*

THE DIRTY CERITHIUM. Shell short, rather black, longitudinally plaited; whorls few, rather ventricose, armed with three rows of tubercles, with ridges between the tubercles; last whorl alternately ribbed and ridged beneath; aperture rather square, columella

broad laminated, outer lip thickened and crenulated within, canal oblique, short.

MENKE, Synopsis.

Hab. West Indies.

Species 114. (Mus. Cuming.)

CERITHIUM BÆTICUM. *Cerith. testâ angustâ, subcylindraceâ, varicosâ, fulvâ; anfractibus vix inflatis, costis fuscis, planatis, angustis, et lineis elevatis, crenatis punctatis, alternatim cinctis; aperturâ parvâ, canali brevi.*

THE DARK-BROWN CERITHIUM. Shell narrow, rather cylindrical, varicose, fawn-coloured; the whorls slightly inflated, encircled with dark-brown, flat, narrow ribs, and elevated, crenulated, punctured lines alternately; aperture small, canal short.

PEASE.

Hab. Sandwich Islands.

The general dark-brown appearance of this pretty little shell is produced by the flattened ribs, which are very dark and distinct; between these are crenulated ridges with spots between the nodules.

Species 115. (Mus. Cuming.)

CERITHIUM PAXILLUM. *Cerith. testâ parvâ, ovali, ventricosâ, fuscâ, longitudinaliter plicatâ, super plicas spiraliter tuberculatâ, inter tubercula spiraliter striatis; anfractibus paucis, subventricosis, ultimo magno, tuberculis minoribus; aperturâ ovali; labro crasso, canali breviusculâ, rectiusculâ.*

THE LITTLE-POST CERITHIUM. Shell small, oval, ventricose, brown, longitudinally plaited, spirally tuberculated upon the plaits, spirally striated between the tubercles; whorls few, rather ventricose, the last large, with small tubercles; aperture oval, outer lip thick, canal rather short, rather straight.

PEASE.

Hab. Sandwich Islands.

Species 116. (Mus. Cuming.)

CERITHIUM GREENII. *Cerith. testâ minutâ, pupæformi, nigrescente; anfractibus ventricosis, longitudinaliter plicatis, triseriatim spiraliter tuberculatis, suturâ excavatâ, ultimo infractu infrà costato; aperturâ parvâ, columellâ breviusculâ, crassâ, canali brevissimo, aperto.*

GREEN'S CERITHIUM. Shell minute, chrysalis-shaped, rather black; whorls ventricose, longitudinally plaited, spirally tuberculated in three rows, suture hollow; last whorl ribbed beneath; aperture small, columella rather short, thick, canal very short, open.

GOULD.

Hab. North America.

117.a.

118.a.

118.b.

119.

120.a.

120.b.

121.

122.a.

122.b.

117.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

CERITHIUM.

PLATE XVII.

Species 117. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM COSTIFERUM. *Cerith. testâ angustatâ, tenui, elongatâ, fulvâ, spiraliter costatâ; anfractibus numerosis, apicalibus angustissimis, medianis inflatis, angulatis, longitudinaliter costiferis, ultimo contracto, infrà costâ spirali cincto; aperturâ parvâ, varice columellari crasso subreflexo, canali fere clauso, labro expanso, fasciatim picto.*

THE RIBBED CERITHIUM. Shell narrow, thin, long, pale-brown, spirally ribbed; whorls numerous, those near the apex narrow, those in the centre inflated, angular, longitudinally ribbed, the last contracted, encircled beneath with a spiral rib; aperture small, columellar varix thick, rather reflected, canal nearly closed, outer lip expanded, banded.

A. ADAMS, Sowerby's Thes. Conch. Cerith. f. 220.
Cerithium costatum, Sowerby (by error).

Hab. ——?

Rather more solid, more ventricose, and more strongly ribbed than *C. macrostoma*.

Species 118. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM MACROSTOMA. *Cerith. testâ gracili, elongatâ, pallidè fulvâ, tenui, spiraliter striatâ, longitudinaliter creberrimè costatâ; anfractibus numerosis, medianis subinflatis, ultimis duobus contractis; aperturâ ovali, varice columellari crasso, canali fere clauso, labro valde expanso, fasciato.*

THE LARGE-MOUTHED CERITHIUM. Shell narrow, long, pale-fulvous, thin; spirally striated, longitudinally and closely ribbed; whorls numerous, the central ones slightly inflated, the last two contracted; aperture oval, columellar varix thick, canal nearly closed, outer lip much expanded, banded.

HINDS, Voy. Sulph. pl. xvi. f. 12.

Hab. Borneo.

A very thin and slender species.

Species 119. (Mus. Cuming.)

CERITHIUM TÆNIATUM. *Cerith. testâ ventricosâ, pyramidatâ, spiraliter striatâ, pallidè fulvâ, ad anfractum ultimum et aperturam spiraliter fusco-rubescente tæniatâ; anfractibus numerosis, apicalibus angulatis angustissimis, medianis inflatis, infrà prope suturam angulatis, pliciferis, ultimo subcontracto, suprà plicato; aperturâ ovatâ, columellâ brevi, albâ, canali brevi, aperto, labro tenui, paululum reflexo.*

THE RIBANDED CERITHIUM. Shell ventricose, tapering, spirally striated, pale-fulvous, ribanded with reddish-brown on the last whorl, and in the aperture; whorls numerous, those of the apex angular and very narrow, those in the centre ventricose, angular and plicated beneath, near the suture, the last rather contracted, plaited above; aperture oval, columella short, white, canal short, open, outer lip thin, a little reflected.

SOWERBY.

Hab. Cape Natal.

Resembling *Cerithium pingue*, but much narrower, with the plaits on the last whorl much smaller and more numerous.

Species 120. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM CONTRACTUM. *Cerith. testâ solidâ, ventricosâ, spiraliter creberrimè striatâ, longitudinaliter plicatâ; anfractibus apicalibus angustatis, medianis inflatis, infra medium angulatis, costis tuberculatibus subobliquis armatis, ultimo validè contracto; aperturâ obliquâ, columellâ brevi, aperto, labro tenui, lineis rubris picto, infrà expanso.*

THE CONTRACTED CERITHIUM. Shell solid, ventricose, spirally closely striated, longitudinally plaited; apical whorls narrow, central inflated, angular below the middle, armed with tubercular, rather oblique ribs, the last much contracted; aperture oblique, columella short, canal short, open, outer lip thin, marked with red lines, expanded beneath.

SOWERBY, Thes. Conch. Cerithium, no. 124. f. 218.

Hab. Cape Natal.

A much narrower and more solid shell than *Cerithium pingue*.

Species 121. (Mus. Cuming.)

CERITHIUM PINGUE. *Cerith. testâ ventricosâ, brevi, fuscâ, spiraliter tenuiter striatâ; anfractibus apicalibus quinque angustatis, angulatis, pliciferis, medianis quatuor gradatim crescentibus, inflatis, infrà tuberculatis, ultimo infrà contracto, suprà tuberculato; aperturâ subquadratâ, columellâ brevi, subtortuosâ, canali brevissimâ apertâ, labro anticè subproducto, lineis rubris pictâ.*

THE PAINTED CERITHIUM. Shell ventricose, short, brown, spirally finely striated; five apical whorls narrow, angular, plicated, four middle whorls gradually enlarging, ventricose, tuberculated beneath; last whorl contracted beneath, tuberculated above; aperture rather square, rather produced in front, painted with reddish lines.

A. ADAMS (Colina), Thes. Sowerby's Conch. Cerith., no. 123. f. 217.

Hab. Cape Natal; Cuming.

This may be considered as the type of the little group included by Mr. Adams in his genus "*Colina*," characterized by a contraction in the last whorl.

Species 122. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM PUPÆFORME. *Cerith. testâ angustatâ, pupæformi, spiraliter sulcatâ, albidâ, longitudinaliter plicatâ; anfractibus numerosis, angulatis, medianis ventricosis, ultimis contractis; aperturâ oblongâ, columellâ obliquâ, truncatâ, canali angusto, rectiusculo, labro tenui, contracto, infrà subangulato.*

THE CHRYSALIS-SHAPED CERITHIUM. Shell narrow, chrysalis-shaped, spirally grooved, whitish, longitudinally plicated; whorls numerous, angulated, those in the centre ventricose, the last contracted; aperture oblong, columella oblique, truncated, canal narrow, rather straight, outer lip thin, contracted, slightly angular beneath.

A. ADAMS, Sowerby's Thes. Conch. Cerith., no. 127. f. 221.

Hab. Philippines; Cuming.

123.

124.

125.

126.

127

128.

129.

130 a.

130 b.

131.

CERITHIUM.

PLATE XVIII.

Species 123. (Mus. Cuming.)

CERITHIUM GIBBERULUM. *Cerith. testâ minutâ, ovali, gibbosâ, fuscâ, leviter longitudinaliter plicatâ, lineis elevatis fusco-nigrescentibus crenulatis cinctâ; anfractibus novem, subventricosis; aperturâ ovatâ, columellâ brevi, canali brevissimo, labro incrassato, rotundo, intus crenulato.*

THE LITTLE-GIBBOUS CERITHIUM. Shell minute, oval, gibbous, brown, lightly longitudinally plaited, girt with elevated, blackish-brown, crenulated lines; whorls nine, rather ventricose; aperture ovate, columella short, canal very short, outer lip thickened, round, crenulated within.

C. B. ADAMS.

Hab. North America.

A very small shell, with thickened outer lip and varices.

Species 124. (Mus. Cuming.)

CERITHIUM IOTA. *Cerith. testâ minutissimâ, conicâ, nigrescente, infrà subcomplanatâ; anfractibus paucis, spiraliter triseriatim tuberculatis, longitudinaliter leviter plicatis; aperturâ subtrigonâ, columellâ brevi, canali aperto, brevissimo, labro vix incrassato.*

THE DOT CERITHIUM. Shell very minute, conical, blackish, rather flat beneath; whorls few, tuberculated in three spiral rows, slightly plaited lengthwise; aperture rather trigonal, columella short, canal open, very short, outer lip very slightly thickened.

C. B. ADAMS.

Hab. Jamaica.

Species 125. (Mus. Cuming.)

CERITHIUM PARCUM. *Cerith. testâ parvâ, albâ, pyramidatâ, longitudinaliter plicatâ, plicis rotundis, spiraliter costatâ, costis ad plicas tuberculiferis; anfractibus paucis, leviter ventricosis, ultimo subfusiformi; aperturâ ovatâ, columellâ rectiusculâ, elongatâ.*

THE MODERATE CERITHIUM. Shell small, white, tapering, longitudinally plaited, plaits round, spirally ribbed, ribs tuberculated on the plaits; whorls few, slightly ventricose, the last rather fusiform, aperture oval, columella rather straight, elongated.

GOULD.

Hab. Mazatlan.

Species 126. (Mus. Cuming.)

CERITHIUM ALTUM. *Cerith. testâ elongatâ, angustâ, pallidè fulvâ, spiraliter castaneo fasciatâ, minutissimè decussatâ, varicibus albis; anfractibus rectiusculis, ultimo subrotundato; aperturâ ovatâ, columellâ rectâ, labro subincrassato.*

THE TALL CERITHIUM. Shell long, narrow, pale-fawn, spirally banded with chestnut, minutely decussated, varices white, whorls rather straight, the last slightly rounded; aperture ovate, columella straight, outer lip thick.

SOWERBY.

Hab. —— ?

Differing from *C. lacertinum*, *C. elongatum*, etc., in fineness of sculpture. It is delicately banded with light-chestnut.

Species 127. (Mus. Cuming.)

CERITHIUM TRICARINATUM. *Cerith. testâ elevatâ, angustâ, fulvâ; anfractibus turritis, rotundis, spiraliter validè tricarinatis, longitudinaliter plicatis, suturâ excavatâ; aperturâ subquadratâ, columellâ subtortuosâ, canali brevissimo.*

THE THREE-KEELED CERITHIUM. Shell elevated, narrow, light-brown; whorls turreted, rounded, with three strong spiral keels, longitudinally plaited, suture hollow; aperture rather square, columella rather tortuous, canal very short.

PEASE.

Hab. Sandwich Islands.

The keels in each whorl of this shell are strong and prominent, and are crossed at regular intervals by longitudinal plaits, the interstices forming rather square hollows.

Species 128. (Mus. Cuming.)

CERITHIUM INSCULPTUM. *Cerith. testâ elevatâ, subacuminatâ, cæruleâ; anfractibus rectiusculis, ad suturam rotundis, albo-fasciatis, spiraliter distanter sulcatis, ultimo rotundo; aperturâ rotundâ, castaneâ, columellâ brevissimâ, canali brevissimo, aperto.*

THE UNSCULPTURED CERITHIUM. Shell elevated, slightly acuminated, blue; whorls rather straight, rounded at the suture, white-banded, spirally distantly sulcated, the last round; aperture round, chestnut colour, columella very short, canal very short, open.

SOWERBY.

Hab. South Australia.

Species 129. Mus. Cuming.)

CERITHIUM LACERTINUM. *Cerith. testâ elongatâ, subventricosâ, fuscâ; anfractibus numerosis, ad marginem crenulatis, costis tuberculiferis quatuor cinctis, costis duabus superioribus approximatis, alteris magis distantibus, interlineatis; aperturâ subrotundâ, columellâ albâ, rectiusculâ, canali brevissimo, aperto, labro tenui.*

THE LIZARD CERITHIUM. Shell long, rather ventricose, brown; whorls numerous, crenulated at the edge, girt with four tubercled ribs, the two upper ribs near, the others more distant, with an interstitial line; aperture rather round, columella white, rather straight, canal very short, open, outer lip thin.

GOULD, Otia, p. 141.

Hab. Sydney Harbour, U.S.

This shell differs from *C. Lima* materially in sculpture.

Species 129. (Mus. Cuming.)

CERITHIUM TENUE. *Cerith. testâ parvâ, angustâ, tenui, longitudinaliter plicatâ, spiraliter crebricostatâ, albâ, fusco variegatâ; aperturâ subrotundâ, columellâ brevi, canali brevissimo, labro intus crenulato.*

THE THIN CERITHIUM. Shell small, narrow, thin, longitudinally plaited, spirally closely ribbed, white, varied with brown; aperture rather round, columella short, canal very short, outer lip crenulated within.

SOWERBY, Thes. Conch. Cerithium, sp. 119. f. 212.

Hab. Port Lincoln.

This little species is usually dark-banded at the sutures and at the lower part of the last whorl. Our Figure 130 *a* represents a variety, with only a small chestnut spot on the last whorl.

Species 131. (Mus. Cuming.)

CERITHIUM GLARIOSUM. *Cerith. testâ elongatâ, angustâ, nigrescente; anfractibus numerosis, rectiusculis, tuberculorum seriebus quatuor cinctis, longitudinaliter plicatis, suturâ excavatâ, aperturâ parvâ, canali brevissimo.*

THE GRAVELLY CERITHIUM. Shell long, narrow, blackish; whorls numerous, rather straight, girt with four rows of tubercles, longitudinally plicated, suture excavated; aperture small, canal very short.

GOULD, Otia (*Bittium*).

Hab. Loochoo Islands and Bonin Islands.

132.

133

134.

135.

136.a.

136.b.

137.

138.

139.

140

Species 137. (Mus. Cuming.)

CERITHIUM ELONGATUM. *Cerith. testâ attenuatâ, fusco-nigrescente, longitudinaliter obliquè plicatâ, plicis validis tuberculosis; anfractibus obliquis, ventricosis, suturâ excavatâ; aperturâ ovatâ, canali brevi, aperto.*

THE ELONGATED CERITHIUM. Shell attenuated, blackish-brown, longitudinally obliquely plicated, plaits strong, tuberculated; whorls oblique, ventricose, suture excavated; aperture oval, canal short, open.

SOWERBY, Thes. Conch. Cerithium, sp. 132. f. 233, 234.

Hab. Australia; Strange.

Species 138. (Mus. Cuming.)

CERITHIUM GRACILLIMUM. *Cerith. testâ attenuatâ, fusco-nigrescente, longitudinaliter leviter plicatâ, spiraliter tuberculiferâ; anfractibus obliquis, subventricosis, suturâ subexcavatâ; aperturâ parvâ, canali brevi, aperto.*

THE VERY SLENDER CERITHIUM. Shell attenuated, blackish-brown, longitudinally lightly plicated, spirally tuberculated; whorls oblique, rather ventricose, suture slightly excavated; aperture small, canal short, open.

SOWERBY.

Hab. —— ?

The shell is narrower than *C. elongatum*, the whorls less oblique, the longitudinal plaits less prominent, and the tubercles smaller.

Species 139. (Mus. Cuming.)

CERITHIUM QUADRIFILATUM. *Cerith. testâ oblongo-sub-cylindraceâ, pallidâ, longitudinaliter plicatâ, plicis numerosis, validis, tuberculiferis; anfractibus rectiusculis, subquadratis, liris quatuor undulatis cinctis, ultimo subtus bicostato, subtruncato, suturâ valde excavatâ; aperturâ subquadratâ, canali brevissimo.*

THE FOUR-THREADED CERITHIUM. Shell oblong-cylindrical, pale, longitudinally plaited, plaits numerous, strong, tuberculated; whorls rather straight, rather square, girt with four undulating ridges, the last with two ribs beneath, somewhat truncated, suture deeply excavated; aperture nearly square, canal very short.

CARPENTER (*Bittium*).

Hab. Mazatlan.

Species 140. (Mus. Cuming.)

CERITHIUM RUGATUM. *Cerith. testâ oblongo-cylindraceâ, pallidâ, longitudinaliter plicatâ, plicis numerosis, subobliquis, tuberculiferis; anfractibus numerosis, subobliquis, liris tribus undulatis cinctis, ultimâ subtus bicostatâ, subfusiformi, suturâ excavatâ; aperturâ ovatâ, canali brevi, columellâ rectiusculâ, acutâ.*

THE RUGOSE CERITHIUM. Shell oblong-cylindrical, pale, longitudinally plaited, plaits numerous, rather oblique, tuberculated; whorls numerous, rather oblique, girt with three undulated ribs, the last double-ribbed, subfusiform beneath, suture excavated; aperture ovate, canal short, columella rather straight, pointed.

CARPENTER.

Hab. Santa Barbara.

141.

142.a.

142.b.

143.

144.

145.

146.

147.

148.

149.

Sowerby, del. et lith.

Vincent Brooks, Imp.

CERITHIUM.

PLATE XX.

Species 141. (Mus. Cuming.)

CERITHIUM PLACIDUM. *Cerith. testâ parvâ, conicâ, albâ, liris spiralibus scabris cinctâ, interstitiis profundis, scabris; anfractibus rectis, suturâ excavatâ; aperturâ subtrigonâ, labro angulato, columellâ angustâ, subtortuosâ, acutâ, canali brevissimo.*

THE PLACID CERITHIUM. Shell small, conical, white, girt with rough spiral ridges, interstices deep, rough; whorls straight, suture excavated; aperture subtrigonal, outer lip angular, columella narrow, slightly turned, pointed, canal very short.

GOULD, Otia, p. 141.

Hab. China Seas.

Species 142. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIUM ALUTACEUM. *Cerith. testâ parvâ, fulvâ, subovatâ, acuminatâ, longitudinaliter plicatâ, plicis validis, trituberculatis, tuberculis magnis, interstitiis profundè foveatis, suturâ profundâ; ultimo anfractu liris moniliformibus, rubro-punctatis cincto; aperturâ ovali, canali brevi, columellâ tortuosâ.*

THE LEATHERN CERITHIUM. Shell small, brown, rather oval, pointed, longitudinally plaited, plaits strong, three-tubercled, tubercles large, interstices deeply pitted, suture deep; last whorl girt with beaded, red-spotted ridges; aperture ovate, canal short, columella tortuous.

GOULD, Otia (*Bittium*).

Hab. China Seas.

Species 143. (Mus. Cuming.)

CERITHIUM RHODOSTOMA. *Cerith. testâ solidâ, pyramidatâ, pallidè fulvâ, ad aperturam et apicem roseo tincto; anfractibus octo, longitudinaliter plicatis, spiraliter triseriatim super plicas noduliferis, ad interstitia liratis, infrà ventricosis, ultimo paululum contracto; aperturâ subquadratâ, columellâ laminatâ, crassâ, truncatâ, canali reflexo, labro crenulato, fasciato.*

THE SQUARE-MOUTHED CERITHIUM. Shell solid, pyramidal, pale-brown, tinged with pink at the tip and aperture; whorls eight, longitudinally plaited, with three spiral rows of nodules upon the plaits and ridges in the interstices, ventricose below, the last a little contracted; aperture rather square, columella laminar, thick, truncated, canal reflected, outer lip crenulated, banded.

A. ADAMS, Sowerby, Thes. Conch. Cerithium, sp. 49. f. 103.

Hab. Van Diemen's Land.

This little shell rather resembles an elongated *Nassa* in form. It is solid, plicated, and the whorls rather bulge at the lower part, the last being somewhat contracted in proportion to the last but one.

Species 144. (Mus. Cuming.)

CERITHIUM PAUXILLUM. *Cerith. testâ parvâ, pyramidatâ, subcylindricâ, pallidè fulvâ, longitudinaliter plicatâ; anfractibus brevibus, prominentibus, spiraliter costatis, super plicas noduliferis, suturâ excavatâ; aperturâ lateraliter productâ, labro valde expanso, columellâ tortuosâ, canali valido, truncato.*

THE PUNY CERITHIUM. Shell small, pyramidal, subcylindrical, pale-fulvous, longitudinally plaited; whorls short, prominent, spirally ribbed, noduliferous upon the ribs, suture hollow; aperture produced laterally, outer lip expanded, columella tortuous, canal distinct, truncated.

A. ADAMS, Sowerby's Thes. Conch. Cerithium, sp. 178, f. 294.

Hab. Island of Bureas, Philippines; Cuming.

Species 145. (Mus. Cuming.)

CERITHIUM ALGERIANUM. *Cerith. testâ oblongâ, albâ, turritâ; anfractibus numerosis, triseriatim tuberculatis, subventricosis; aperturâ subovali, labro producto, tenui, columellâ brevi, canali brevissimo.*

THE ALGERIAN CERITHIUM. Shell oblong, white, turreted; whorls numerous, tubercled in three rows, ventricose; aperture rather oval, outer lip produced, thin, columella short, canal very short.

SOWERBY, Thes. Conch. Cerithium, sp. 120. f. 230, 231.

Hab. Algeria.

A small, delicate-white species, with the whorls tuberculated in three rows.

Species 146. (Mus. Cuming.)

CERITHIUM SEROTINUM. *Cerith. testâ solidâ, oblongo-cylindraceâ, pallidè fulvâ; anfractibus brevibus, numerosis, longitudinaliter crebri-plicatis, spiraliter striatis, medianis subventricosis, ultimo subcontracto, truncato; aperturâ subquadratâ, lateraliter productâ, columellâ laminatâ, margine extante, canali oblongo, truncato.*

THE EVENING CERITHIUM. Shell solid, oblong-cylindrical, pale-fulvous; whorls short, numerous, longitudinally closely plicated, spirally striated, those of the centre rather ventricose, the last slightly contracted, truncated; aperture rather square, laterally produced, columella laminated, with margin standing out, canal oblong, truncated.

A. ADAMS, Sowerby's Thes. Conch. Cerithium, sp. 48, f. 102.

Hab. Van Diemen's Land.

There are peculiarities in this species and *C. rhodostoma* of almost generic value, among which the free lamina composing the columella, the constricted canal-tube, and the contraction and truncation of the last whorl may be mentioned.

Species 147. (Mus. Cuming.)

CERITHIUM CLATHRATUM. *Cerith. testâ albâ, pyramidatâ, scalatâ; anfractibus novem, ventricosis, spiraliter bicostatis, longitudinaliter plicatis, costis prominentibus, plicis frequentibus, lamelliformibus, moniliferis; ultimo anfractu subtus angulato, ad angulum costâ duplicatâ cincto; aperturâ subquadratâ, columellâ brevi, canali brevi, aperto.*

THE CROSS-BARRED CERITHIUM. Shell white, tapering, rising in steps; whorls nine, ventricose, spirally two-ribbed, longitudinally plaited, ribs prominent, plaits numerous, lamellated, beaded; last whorl angular beneath, girt at the angle with a double rib; aperture rather square, columella short, canal short, open.

A. ADAMS, Sowerby's Thes. Conch. sp. 152. f. 258.

Hab. Baclayon, Island of Bohol, Philippines.

Species 148. (Mus. Cuming.)

CERITHIUM EXCAVATUM. *Cerith. testâ pyramidatâ, spiraliter striatâ, albâ; anfractibus numerosis, supernè ad suturam costâ minutè tuberculatâ ornatis, infra medium angulatis, ad angulum tuberculis validis armatis, infrà ad suturam uniliratis, supra angulum excavatis; aperturâ rhomboideâ, columellâ tenui, canali vix emarginato.*

THE EXCAVATED CERITHIUM. Shell pyramidal, spirally striated, white; whorls numerous, ornamented above at the suture with a minutely tuberculated rib, below the middle, angular, at the angle armed with strong tubercles, beneath, at the suture, one-ridged, the last double-ridged, above the angle hollowed; aperture rhomboidal, columella thin, canal scarcely emarginated.

SOWERBY.

Hab. North Australia.

Species 149. (Mus. Cuming.)

CERITHIUM OBESULUM. *Cerith. testâ brevissimâ, ventricosâ, solidâ, nigrescente; anfractibus paucis, supra medium ad dorsum angulatim subelevatis, spiraliter costis moniliferis cinctis, ultimo magno; aperturâ albidâ, magnâ, columellâ brevissimâ, canali brevi, subcontracto, labro intus crenato.*

THE LITTLE FAT CERITHIUM. Shell very short, ventricose, solid, blackish; whorls few, above the middle at the back angularly slightly elevated, spirally girt with beaded ribs, the last large; aperture whitish, large, columella very short, canal short, slightly contracted, outer lip crenated within.

SOWERBY.

Hab. —— ?

In form resembling *C. obesum*, being slightly raised and bossed at the back, in the same manner as is seen in that species and in *C. dorsuosum*. It is however distinguished by beaded ribs, and is of a dark, almost black, brown colour.

CERITHIUM.

	Plate.	Species
Adansoni, *Bruguière*	II.	11
Adenense, *Sowerby*	XIII.	89
aduncum, *Gould*	IX.	57
adustum, *Kiener*	II.	12
alboliratum, *Carpenter*	XVI.	109
Algerianum, *Sowerby*	XX.	145
algicola, *C. B. Adams*	X.	63
alternatum, *Sowerby*	IV.	22
altum, *Sowerby*	XVIII.	126
aluco, Born	I.	3
alutaceum, *Gould*	XX.	142
armatum, *Philippi*	III.	14
asperum, *Pease*	XIV.	96
atratum, *Born*	V.	32
balteatum, *Philippi*	XI.	72
Bermudæ, *Sowerby*	XIII.	86
bifasciatum, *Sowerby*	V.	34
bæticum, *Pease*	XVI.	114
Bornii, *Sowerby*	IV.	26
breve, Quoy	VII.	45
breviculum, *Sowerby*	VII.	46
cælatum, *Gould*	XV.	106
Californiæ, *Sowerby*	XV.	104
carbonarium, *Philippi*	IX.	59
caudatum, *Sowerby*	III.	16
circinatum, *A. Adams*	IX.	61
citrinum, *Sowerby*	I.	1
clathratum, *A. Adams*	XX.	147
clavis, *Sowerby*	XIV.	94
cœruleum, *Sowerby*	II.	8
columna, *Sowerby*	I.	2
contractum, *Sowerby*	XVII.	120
corallinum, *Sowerby*	V.	29
coronatum, *Sowerby*	VIII.	48
costiferum, *A. Adams*	XVII.	117
crassilabrum, *Krauss*	XIV.	98
dialeucum, *Philippi*	III.	18
dilectum, *A. Adams*	XVI.	112
dorsuosum, *A. Adams*	IX.	56
dubium, *Sowerby*	XII.	78
eburneum, *Bruguière*	VI.	35
echinatum, *Lamarck*	II.	10
egenum, *Gould*	XV	101
elongatum, *Sowerby*	XIX.	137
Eriense, *Valenciennes*	IX.	55
erythræonense, *Lamarck*	I.	5
excavatum, *Sowerby*	XX.	148
eximium, *Sowerby*	XI.	76
famelicum, *C. B. Adams*	III.	13
fenestratum, *Sowerby*	VI.	39
ferrugineum, *Say*	XIV.	92
filosum, *Sowerby*	XII.	82
fucatum, *Pease*	XV.	102
fuscatum, Costa	VIII.	53
fusiforme, *Sowerby*	VIII.	47
gemma, *Sowerby*	X.	70
gemmulatum, *Bruguière*	IV.	23
gibberulum, *C. B. Adams*	XVIII.	123
glareosum, *Gould*	XVIII.	131
gracile, Pease	XIV.	95
graciliforme, *Sowerby*	VIII.	49
gracillimum, *Sowerby*	XIX.	138
granarium, *Kiener*	XIX.	135
granosum, *Kiener*	XI.	73
Greenii, *Gould*	XVI.	116
Guiniacum, *Philippi*	VIII.	51
Ianthinum, *Gould*	XV.	100
inflatum, *Quoy*	IX.	60
insculptum, *Sowerby*	XVIII.	128
interruptum, Gould	IV.	23
interstriatum, *Sowerby*	XIV.	93
invaginatum, *Gould*	X.	64
iota, *C. B. Adams*	XVIII.	124
irroratum, Gould	IV.	23
lacertinum, *Gould*	XVIII.	128
lacteum, *Kiener*	XIII.	85
lemniscatum, *Quoy*	V.	27
lentiginosum, *Sowerby*	XI.	77
lima, *Bruguière*	XIX.	133
litteratum, *Born*	IV.	25
lutosum, *Menke*	XVI.	113
macrostoma, *Hinds*	XVII.	118
maculosum, *Mighels*	XIV.	97
maculosum, Kiener	II.	7
Mediterraneum, *Deshayes*	VIII.	53
mitræforme, *Sowerby*	XI.	74
moniliferum, *Kiener*	IV.	20
morus, *Lamarck*	VII.	42
munitum, *Philippi*	X.	69
muscarum, *Say*	X.	67
musicum, *Sowerby*	VI.	40
mutabile, *C. B. Adams*	XVI.	111
nassoide, *Sowerby*	XII.	83
nebulosum, *Sowerby*	II.	7

	Plate.	Species.
nigrum, Totten	XVI.	110
nigro-fasciatum, *Sowerby*	IX.	58
nitidum, *Sowerby*	V.	28
nivosum, *Sowerby*	XV.	105
nodosus, Schrœter	II.	9
nodulosum, *Bruguière*	I.	3
Novæ-Hiberniæ, *A. Adams*	X.	68
Novæ-Hollandiæ, *A. Adams*	V.	30
obesulum, *Sowerby*	XX.	149
obesum, *Sowerby*	IX.	62
ocellatum, *Bruguière*	IV.	23
parcum, *Gould*	XVIII.	125
patulum, *Sowerby*	V.	33
pauxillum, *A. Adams*	XX.	144
paxillum, *Pease*	XVI.	115
petrosum, *Wood*	VII.	43
pingue, *A. Adams*	XVII.	121
piperitum, *Sowerby*	XII.	81
placidum, *Gould*	XX.	141
planum, *Anton*	XII.	79
polygonum, *Sowerby*	III.	17
punctatum, Bruguière	XII.	81
pupa, *Sowerby*	XII.	84
pupæforme, *A. Adams*	XVII.	122
purpurascens, *Sowerby*	VI.	36
quadrifilatum, *Carpenter*	XIX.	139
rari-maculatum, *Sowerby*	XV.	103
reticulatum, *Costa*	XIX.	134
rhodostoma, *A. Adams*	XX.	143
Rissoide, *Sowerby*	XV.	107
robustum, *Sowerby*	VII.	44
rostratum, *Sowerby*	XIV.	95
rubus, *Martyn*	XI.	75
rugatum, *Carpenter*	XIX.	140
rugosum, *Wood*	VII.	45
Ruppellii, *Philippi*	I.	6
salebrosum, *Sowerby*	X.	65
Sandvichense, *Sowerby*	VI.	37
Sayi, *Menke*	XVI.	110
scabridum, *Philippi*	VIII.	52
semiferrugineum, *Lamarck*	VI.	38
serotinum, *A. Adams*	XX.	146
siphonatum, *Sowerby*	XIII.	90
sordidulum, *Gould*	XIII.	87
spathuliferum, *Sowerby*	VIII.	50
splendens, *Sowerby*	III.	19
striatissimum, *Sowerby*	V.	31
striatus, Schrœter	I.	5
subnodosum, *Adams*	I.	4
suturale, *Philippi*	VIII.	54
tæniatum, *Sowerby*	XVII.	119
tenellum, *Sowerby*	XI.	71
tenue, *Sowerby*	XVIII.	130
tessellatum, *Sowerby*	X.	66
Thomasii, *Sowerby*	XV.	108
thymetus, Mensch	II.	9
Trailli, *Sowerby*	IV.	24
tricarinatum, *Pease*	XVIII.	127
trochæforme, *Sowerby*	XIX.	132
tuberculatum, *Linnæus*	IV.	21
tuberculatum, Born	IV.	26
tuberosum, *Fabricius*	I.	5
tuberosus, Dillwyn	I.	3
turritum, *Sowerby*	XIII.	88
uncinatum, *Gmelin*	III.	13
umbonatum, *Sowerby*	III.	15
unilineatum, *Pease*	XV.	99
variabile, *C. B. Adams*	XIII.	91
variegatum, *Quoy*	VII.	41
versicolor, *C. B. Adams*	XII.	80
vulgatum, *Bruguière*	II.	9
zebrum, *Kiener*	XIX.	136

1.a.

3.

2.

4.a.

6.

5.

4.b.

8

7.

1.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

EULIMA.

PLATE I.

Genus EULIMA, Risso.

Testa elongata, multispiralis, polita; varicibus impressis, frequenter lateralibus, continuis; apice acuto, plerumque tortuo; aperturâ ovatâ, supernè acuminatâ, labio interno reflexo, axi imperforato, labro incrassato; operculo corneo, ovato, subspirali.

Shell elongate, many-whorled, polished, with impressed varices, frequently lateral, continuous, apex acute, generally tortuous; aperture ovate, acuminated above, inner lip reflected, axis imperforate; operculum horny, oval, subspiral.

A monograph of *Eulima* and other allied genera of turreted shells, by Mr. Arthur Adams, in Mr. Sowerby's 'Thesaurus,' in the year 1854. A few interesting species have been added to the list, several of which we are enabled to figure through the kindness of Mr. G. F. Angas. The species appear to a bound most in the groups of the Pacific. The Indian Seas, China, and the Philippines present a considerable number of species. *E. polita* and *E. distorta* are the British representatives of the genus.

The genus *Eulima*, as described above, is distinguished from *Nisso* in being imperforate, and from *Leiostraca* in characters to be described in the monograph of that genus.

Species 1. (Fig. *a*, *b*, Mus. Cuming.)

EULIMA ARTICULATA. *Eul. testâ acuminato-pyramidatâ, albâ, fusco articulatâ et marmoratâ; anfractibus subrotundatis, varicibus subprominulis, labio externo crassiusculo.*

THE ARTICULATED EULIMA. Shell acuminately-pyramidal, white, articulated and marbled with brown; whorls rather rounded, varices slightly prominent, outer lip rather thick.

SOWERBY, Pro. Zool. Soc. 1834.

Hab. Australia.

The only species of true *Eulima* with variegated colouring yet known.

Species 2.

EULIMA LACTEA. *Eul. testâ albâ, opacâ, solidâ, politâ, subulatâ; anfractibus planiusculis, varicibus continuis impressis ad latus dextrum instructis; aperturâ ellipticâ, anticè subproductâ, labio interno reflexiusculo, labro incrassato.*

THE MILKY EULIMA. Shell white, opake, solid, polished, subulate; whorls rather flat, varices continuous, impressed on the right side; aperture elliptical, slightly produced in front, inner lip slightly reflected, outer lip thickened.

A. ADAMS, Sowerby's Thesaurus, Eulima, sp. 25.

Hab. Philippines.

Species 3. (Mus. Cuming.)

EULIMA TEINOSTOMA. *Eul. testâ albâ, pupæformi, rectâ, subpellucidâ; anfractibus duodecim planiusculis, lineâ impressâ infra suturam, anfractu ultimo rotundato; aperturâ oblongo-ovali, anticè productâ, labio interno rectiusculo, anticè reflexo, labro margine in medio dilatato.*

THE NARROW-MOUTHED EULIMA. Shell white, pupiform, straight, rather pellucid; whorls twelve, rather flat, with an impressed line beneath the suture, last whorl rounded; aperture oblong-oval, produced in front, inner lip rather straight, reflected in front, outer lip with the margin dilated in front.

A. ADAMS, Sowerby's Thesaurus, Eulima, sp. 14.

Hab. Fiji Islands, on coral reefs; H. Cuming.

This species is unusually straight, with the central whorls slightly inflated, so as to give the shell a rather more pupiform appearance than most of the genus.

Species 4. (Fig. *a*, *b*, Mus. Cuming.)

EULIMA GRANDIS. *Eul. testâ subulato-pyramidali, albâ, solidâ, opacâ, flexuosâ; anfractibus quindecim, planiusculis, varicibus lateralibus continuis, anfractu ultimo angulato; aperturâ oblongo-ovali, columellâ callosâ, labro margine flexuoso, anticè subreflexo.*

THE LARGE EULIMA. Shell subulate-pyramidal, white, solid, opake, flexuous; whorls fifteen, rather flat, with lateral, continuous varices, the last whorl angulated; aperture oblong-oval, columella callous, outer lip with the margin flexuous, slightly reflected in front.

A. ADAMS, Sowerby's Thesaurus, Eulima, sp. 19.
Hab. Island of Bureas, Philippines.

This magnificent shell was dredged by Mr. Cuming in coral sand.

Species 5. (Mus. Cuming.)

EULIMA MAJOR. *Eul. testâ subulatâ, solidâ, opacâ; anfractibus convexiusculis, varicibus obliquè continuis; aperturâ pyriformi, basi subdilatatâ, labro medio arcuatim paulo producto.*

THE LARGER EULIMA. Shell subulate, solid, opake; whorls rather convex, the varices obliquely continuous; aperture pyriform, rather dilated at the base, the outer lip slightly arched and produced in the middle.

SOWERBY, Pro. Zool. Soc. 1834.
Hab. Tahiti.

The whorls in this large species are rather convex. It is not very tortuous. The arched shell, figured as a variety in the 'Conchological Illustrations,' is there described as a new species, *E. arcuata*, sp. 14.

Species 6. (Mus. Cuming.)

EULIMA MARTINII. *Eul. testâ pyramidali, acuminatâ, albâ, solidâ, politâ, apice flexuosâ; anfractibus numerosis, planulatis, varicibus impressis, obliquè ad apicem continuis, anfractu ultimo subangulato; aperturâ ovali, columellâ incrassatâ, anticè reflexâ, labro in medio producto.*

MARTIN'S EULIMA. Shell pyramidal, acuminate, white, solid, polished, with flexuous apex; whorls numerous, flat, varices impressed, obliquely continuous to the apex, last whorl rather angular; aperture oval, columella thickened, reflected in front, outer lip produced in the centre.

A. ADAMS, Sowerby's Thesaurus, Eulima, sp. 8.
Hab. St. Helena.

More broadly pyramidal than most of the other species.

Species 7. (Mus. Cuming.)

EULIMA FLEXUOSA. *Eul. testâ subulatâ, flexuosâ, subopacâ, solidâ; anfractibus quindecim, planulatis, lineâ impressâ subpellucidâ ad suturam, anfractu ultimo rotundato; aperturâ oblongâ, labro margine flexuoso, in medio producto.*

THE FLEXUOUS EULIMA. Shell subulate, flexuous, subopake, solid; whorls fifteen, flat, with an impressed, half-transparent line at the suture, last whorl rounded; aperture oblong, outer lip with a flexuous margin, produced in the centre.

A. ADAMS, Sowerby's Thesaurus, Eulima, sp. 13.
Hab. ——?

The outer lip is more flexuous in form than in the preceding species.

Species 8. (Mus. Cuming.)

EULIMA CUMINGII. *Eul. testâ subventricosâ, rectiusculâ, albâ, opacâ; anfractibus tredecim, convexiusculis, varicibus irregularibus, impressis, anfractu ultimo rotundato; aperturâ oblongâ, ovali, columellâ crassâ, vix arcuatâ, labro rectiusculo.*

CUMING'S EULIMA. Shell subventricose, rather straight, white, opake; whorls thirteen, slightly convex, varices irregular, impressed, last whorl rounded; aperture oblong, oval, columella thick, scarcely arched, outer lip rather straight.

A. ADAMS, Sowerby's Thesaurus, Eulima, sp. 21.
Hab. Lord Hood's Island, South Seas.

This beautiful shell was taken on the pearl-oyster.

9.

10.a.

10.b.

11.

12

13.

14.

15.a.

15.b.

16.

EULIMA.

PLATE II.

Species 9. (Mus. Cuming.)

EULIMA HASTATA. *Eul. testâ breviusculâ, rectiusculâ, pyramidatâ, ad basin latâ, pallidissimè roseâ, supra medium fulvâ; anfractibus apicalibus paulo ventricosis, alteris rectis, ultimo angulatim rotundato; aperturâ subovatâ, labro ad medium paulo producto, apice vix contortâ, varicibus conspicuis.*

THE SPEAR-SHAPED EULIMA. Shell rather short, rather straight, pyramidal, broad at the base, very pale pink, brown above the centre; apical whorls slightly ventricose, the others straight, the last angularly rounded; aperture rather oval, outer lip a little produced in the middle.

SOWERBY, Pro. Zool. Soc. 1834; Thes. Conch. f. 7, 8.

Hab. St. Elena.

Pyramidal, with a broader base than most of the other species.

Species 10. (Fig. *a*, *b*, Mus. Cuming.)

EULIMA LABIOSA. *Eul. testâ acuminato-pyramidali, basi latiusculâ; anfractibus convexiusculis, ultimo rotundo, apice validè contorto; aperturâ ovatâ, labro sinuato, supra medium producto, incurvo.*

THE LABIOSE EULIMA. Shell acuminated, pyramidal, rather wide at the base; whorls slightly convex, the last rounded, apex much contorted; aperture ovate, outer lip sinuous, produced and incurved above the centre.

SOWERBY, Pro. Zool. Soc. 1834.

Hab. Island of Annaa, Pacific.

A short, hyaline, tortuous little species.

Species 11. (Mus. Cuming.)

EULIMA PORCELLANA. *Eul. testâ albâ, opacâ, solidâ, elongatâ, rectiusculâ, apice subflexuoso; anfractibus planulatis, varicibus irregularibus, conspicuis; aperturâ ovali-oblongâ, labro supernè subemarginato, infra medium paulo producto.*

THE PORCELAIN EULIMA. Shell white, opake, solid, long, rather straight, apex rather reflected; whorls flat, varices irregular, conspicuous; aperture oval-oblong, outer lip emarginated above, produced below the middle.

A. ADAMS, Sowerby's Thes. Conch. Eulima, sp. 18.

Hab. ——?

This shell is remarkable for its solid, porcelain-like structure.

Species 12. (Mus. Cuming.)

EULIMA TORTUOSA. *Eul. testâ solidâ, albâ, angustatâ, medio et ad apicem tortuosâ; anfractibus planiusculis, obliquè varicosis; aperturâ parvâ, ovali.*

THE TORTUOUS EULIMA. Shell solid, white, narrow, tortuous in the middle and at the apex; whorls rather flat, obliquely varicose; aperture small, oval.

ADAMS and REEVE, Zoology of the Samarang, p. 53. pl. xi. f. 26.

Hab. China Seas.

Similar to *E. porcellana* in structure, but a much narrower shell, with flattened whorls.

Species 13. (Mus. Cuming.)

EULIMA SUBANGULATA. *Eul. testâ pyramidali, acuminatâ, tenui, in partibus pallidè fulvo fasciatâ; anfractibus planatis, ultimo subangulato; aperturâ ovali, oblongâ, labro ad angulum paulo producto.*

THE SUBANGULATED EULIMA. Shell pyramidal, acuminated, thin, in parts banded with pale-fawn; whorls flat, the last slightly angulated; aperture oval, oblong, outer lip a little produced at the angle.

SOWERBY, Pro. Zool. Soc. 1834, Thes. Conch. f. 11, 12.

Hab. Indian Ocean.

Like *E. hastata*, pyramidal, but not so wide at the base.

Species 14. (Mus. Cuming.)

EULIMA ARCUATA. *Eul. testâ subdiaphanâ, albâ, medio arcuatâ; anfractibus convexis; aperturâ ovali, labro crasso, ad suturam emarginato, medio producto.*

17.

18.

19.

20.a.

21.

22.

20.b.

23.

24.

25.

EULIMA.

PLATE III.

Species 17. (Mus. Cuming.)

EULIMA CUSPIDATA. *Eul. testâ oblongâ, subventricosâ, breviusculâ; anfractibus paulo convexis, ultimo ovali; aperturâ ovatâ, labro rectiusculo, tenui, apice recto, acuminato, varicibus inconspicuis.*

THE SPIKED EULIMA. Shell oblong, subventricose, rather short; whorls a little convex, the last oval; aperture ovate, outer lip nearly straight, thin, apex straight, acuminated, varices inconspicuous.

A. ADAMS, Sowerby's Thes. Conch. Eulima, sp. 16. f. 33.

Hab. Island of Zebu, Philippines, on loose coral, under stones, at low water.

Species 18. (Mus. Cuming.)

EULIMA SOLIDA. *Eul. testâ parvâ, rectiusculâ, ovato-subventricosâ, solidâ, albâ; anfractibus vix convexis, ultimo rotundato-angulato; aperturâ parvâ, ovali, labro crasso, medio paulo producto.*

THE SOLID EULIMA. Shell small, rather straight, ovately subventricose, solid, white; whorls scarcely convex, the last with a rounded angle; aperture small, oval, outer lip thick, a little produced in the middle.

SOWERBY.

Hab. Sandwich Islands.

A very solid little shell, with the aperture contracted by the thickness of the outer lip.

Species 19. (Mus. Cuming.)

EULIMA VITREA. *Eul. testâ tenui, subtranslucidâ, brevi, rectâ, medio subventricosâ, pallidè fulvâ; anfractibus rectis, ultimo ovato; aperturâ ovatâ, labro medio producto, tenui.*

THE GLASSY EULIMA. Shell thin, rather transparent, short, straight, rather ventricose in the middle, pale-fawn; whorls straight, the last oval; aperture oval, outer lip produced in the middle, thin.

A. ADAMS, Sowerby's Thes. Conch. Eulima, sp. 23. f. 35.

Hab. Feejee Islands; Cuming.

A light, transparent, straight species, found in the stomach of a *Holothuria*.

Species 20. (Fig. *a*, *b*, Mus. Cuming.)

EULIMA SUBPELLUCIDA. *Eul. testâ brevi, ventricosâ, tenui, albâ, anfractu ultimo suprà opacâ, infrà semi-pellucidâ; anfractibus paucis, rectiusculis, ultimo obscurè angulato; aperturâ ovatâ, labro tenui, rectiusculo, varicibus paucis, indistinctis.*

THE SEMI-TRANSPARENT EULIMA. Shell short, ventricose, thin, white, the last whorl opake above, half-transparent beneath; whorls few, rather straight, the last obscurely angulated; aperture oval, outer lip thin, rather straight, varices few, indistinct.

PEASE.

Hab. Sandwich Islands.

The upper part of the last whorl, as well as the spire, is opake, the lower part nearly transparent.

Species 21. (Mus. Cuming.)

EULIMA SANDVICHENSIS. *Eul. testâ brevissimâ, ventricosâ, tenui, albâ, opacâ; anfractibus paucis, convexis, ultimo rotundo, infrà opaco; aperturâ ovatâ, labro sinuato, crassiusculo, supra medium producto.*

THE SANDWICH-ISLAND EULIMA. Shell very short, ventricose, thin, white, opake; whorls few, convex, the last round, opake beneath; aperture oval, outer lip sinuous, rather thick, produced above the centre.

SOWERBY.

Hab. Sandwich Islands.

Shorter than *E. subpellucida* (sp. 20), with rounded whorls.

Species 22. (Mus. Cuming.)

EULIMA CONOIDALIS. *Eul. testâ pyramidatâ, ad basin latiusculâ, solidâ, albâ, opacâ; anfractibus planatis, ultimo subangulato; aperturâ subangulatâ, anticè productâ, varicibus irregularibus.*

THE CONICAL EULIMA. Shell pyramidal, rather broad at base, solid, white, opake; whorls flat, the last rather angulated; aperture slightly angular, produced in front, varices irregular.

SOWERBY.

Hab. Sandwich Islands.

A very conical, solid species.

Species 23. (Mus. Cuming.)

EULIMA PYRAMIDALIS. *Eul. testâ parvâ, brevi, pyramidatâ, contortâ, nitidâ, albâ, subpellucidâ; anfractibus decem, vix convexis, ultimo rotundo; aperturâ parvâ, subrotundatâ, lateraliter productâ, labro tenui, infra medium producto.*

THE PYRAMIDAL EULIMA. Shell small, short, pyramidal, tortuous, shining, white, subpellucid; whorls ten, scarcely convex, the last rounded; aperture small, rather rounded, laterally produced, outer lip thin, produced below the centre.

A. ADAMS, Sowerby's Thes. Conch. Eulima, sp. 11. f. 16.

Hab. Island of Capul (on the reefs at low water); Cuming.

Species 24. (Mus. Cuming.)

EULIMA POLYGYRA. *Eul. testâ pyramidatâ, rectâ, angustâ, ad basin angulatâ, albâ, opacâ; anfractibus numerosis, brevibus, planulatis, ultimo angulato; aperturâ subrhomboideâ, parvâ, ad basin acutè productâ, labro tenui, supra medium sinuatim emarginato, infrà producto.*

THE MANY-WHORLED EULIMA. Shell pyramidal, straight, narrow, angular at the base, white, opake; whorls numerous, short, flat, the last angular; aperture obliquely four-sided, small, acutely produced at the base, outer lip thin, sinuously emarginated above the middle, produced below.

A. ADAMS, Sowerby's Thes. Conch. Eulima, sp. 24. f. 36.

Hab. Island of Mindanao, Philippines (in sandy mud, fifty fathoms); Cuming.

A neat little shell, with short, straight whorls.

Species 25. (Mus. Cuming.)

EULIMA PUSILLA. *Eul. testâ solidâ, subcylindricâ, acuminatâ, angustâ, medio paulo ventricosâ; anfractibus planiusculis, ultimo oblongo; aperturâ ovali-oblongâ, margine recto.*

THE DWARF EULIMA. Shell solid, subcylindrical, acuminated, narrow, a little swelled in the middle; whorls rather flat, the last oblong; aperture ovate-oblong, with straight edge.

SOWERBY, Pro. Zool. Soc. 1834; Thes. Conch. Eulima, f. 19, 20, 21.

Hab. St. Elena; Cuming.

In form resembling *E. vitrea*, but quite opake.

26.

27.a.

27.b.

28.

29.a.

29.b.

30.

31.

32.

33.

Sowerby, del. et lith.

Vincent Brooks, Imp.

EULIMA.

PLATE IV.

Species 26.

EULIMA NITIDA. *Eul. testâ subulatâ, pyramidatâ, rectiusculâ; anfractibus decem, subplanulatis, ultimo subventricoso, obscurè purpureo; aperturâ ovali, labro tenui, rectiusculo.*

THE SHINING EULIMA. Shell subulate, pyramidal, rather straight; whorls ten, nearly flat, the last slightly ventricose, obscurely purple; aperture oval, outer lip thin, rather straight.

LAMARCK (*Melania*), Hist. Nat. Anim. sans vert.

Hab. Mediterranean.

Species 27. (Fig. *a*, *b*, Mus. Cuming.)

EULIMA BREVIS. *Eul. testâ brevissimâ, ventricosâ, acuminatâ, apice contortâ, hyalinâ, partim pallidè fulvâ; anfractibus brevibus, ultimo rotundo; aperturâ lateraliter productâ, labro sinuato.*

THE SHORT EULIMA. Shell very short, ventricose, acuminated, with twisted apex, hyaline, partly pale-fawn; whorls short, the last rounded; aperture laterally produced, outer lip sinuated.

SOWERBY, Pro. Zool. Soc. 1834; Thes. Conch. Eulima, sp. 27. f. 32.

Hab. Pacific Ocean. On shells of the Pearl Oyster.

A bright little glassy shell.

Species 28. (Mus. Cuming.)

EULIMA OBESULA. *Eul. testâ ovali, brevi, subpellucidâ, pallidè roseo-tinctâ; anfractibus paucis, convexis, ultimo rotundo; aperturâ subrotundâ, labro sinuato, supra medium producto.*

THE LITTLE FAT EULIMA. Shell oval, short, rather transparent, tinged with pale-rose; whorls few, convex, the last round; aperture rather round, outer lip sinuated, produced above the middle.

A. ADAMS, Sowerby's Thes. Conch. Eulima, no. 15. f. 34.

Hab. Island of Bohol, Philippines, in soft mud, eight fathoms; Cuming.

Shorter than *E. Sandvichensis*, with still more rounded whorls.

Species 29. (Fig. *a*, *b*, Mus. Cuming.)

EULIMA DISTORTA. *Eul. testâ parvâ, solidâ, opacâ, albâ, pyramidatâ, irregulariter arcuatâ; anfractibus planulatis, ultimo oblongo, obscurè angulato; aperturâ oblongâ, subangulatâ, labro crasso, recto.*

THE DISTORTED EULIMA. Shell small, solid, opake, white, pyramidal, irregularly arched; whorls flat, the last oblong, obscurely angulated; aperture oblong, slightly angulated, outer lip thick, straight.

DESHAYES, Coq. Foss. de Paris.

Melania distorta, Philippi.

Hab. Sicily, Britain, etc.

Species 30. (Mus. Cuming.)

EULIMA OPACA. *Eul. testâ rectiusculâ, subulatâ, subovali, albâ, opacâ, solidâ; anfractibus paulo convexis, ultimo ovali; aperturâ ovatâ, labro crasso, rectiusculo.*

THE OPAKE EULIMA. Shell rather straight, subulate, slightly oval, white, opake, solid; whorls a little convex, the last oval; aperture ovate, outer lip thick, nearly straight.

SOWERBY.

Hab. Sandwich Islands.

Species 31. (Mus. Cuming.)

EULIMA RETRORSA. *Eul. testâ solidâ, supernè pallidè fulvâ, parvâ, angustâ, apice retrorso; anfractibus planulatis, rectiusculis; aperturâ parvâ, ovali-oblongâ, labro subincrassato, rectiusculo.*

THE RECURVED EULIMA. Shell solid, pale-fawn above, small, narrow, with apex bent backwards; whorls flat, rather straight; aperture small, oval-oblong; outer lip rather thickened, nearly straight.

SOWERBY.

Hab. Tahiti.

Species 32. (Mus. Cuming.)

EULIMA GRACILLIMA. *Eul. testâ solidâ, opacâ, nitente, angustissimâ, tortuosâ; anfractibus numerosis, ultimo oblongo; aperturâ parvâ, ovatâ, lateraliter productâ, labro crassiusculo, recto.*

THE VERY SLENDER EULIMA. Shell solid, opake, shining, very narrow, tortuous; whorls numerous, the last oblong; aperture small, ovate, laterally produced, outer lip rather thick, straight.

SOWERBY.

Hab. Guatemala.

Species 33. (Mus. Cuming.)

EULIMA MICANS. *Eul. testâ rectâ, albâ, semipellucidâ, nitens; anfractibus rectiusculis, planatis, ultimo oblongo-ovali; aperturâ ovatâ, angustâ, labro rectiusculo, vix incrassato.*

THE BRILLIANT EULIMA. Shell straight, white, semipellucid, shining; whorls rather straight, flat, the last oblong-oval; aperture oval, narrow, outer lip rather straight, scarcely thickened.

CARPENTER.

Hab. St. Diego.

34.

35 a.

35 b.

36 a.

37.

38.

36 b.

39.

40.

41

Sowerby, del. et lith.

Vincent Brooks, Imp.

EULIMA.

PLATE V.

Species 34. (Mus. Cuming.)

EULIMA IOTA. *Eul. testâ minutissimâ, conicâ, albâ, latâ; anfractibus paucis, planulatis, apice acuminato, tortuo; aperturâ subrhomboideâ, columellâ rectiusculâ, infrà acuminatâ, labro tenui.*

THE DOT EULIMA. Shell very small, conical, white, broad; whorls few, flat, apex acuminated, twisted; aperture somewhat rhomboidal, columella rather straight, pointed beneath, outer lip thin.

C. B. ADAMS, 'Shells of Jamaica.'

Hab. Jamaica; Panama.

A very minute, white, sharp shell, pointed at the end of the mouth, and broad at the base of the conical spire.

Species 35. (Fig. *a*, *b*, Mus. Cuming.)

EULIMA NITIDULA. *Eul. testâ parvâ, ovatâ, nitidâ, solidâ, subventricosâ; anfractibus rotundis, centralibus fulvescentibus, apice albo, mucronato; aperturâ parvâ, columellâ brevi, subtortuâ.*

THE SMOOTH LITTLE EULIMA. Shell small, ovate, shining, solid, rather ventricose; whorls round, the central ones brownish, apex white, mucronate; aperture small, columella short, rather twisted.

PEASE, Pro. Zool. Soc. 1860.

Hab. Sandwich Islands.

A rather thick, *Rissoa*-shaped shell.

Species 36. (Fig. *a*, *b*, Mus. Cuming.)

EULIMA ACICULATA. *Eul. testâ subcylindraceâ, albâ, pallidè fulvo fasciatâ, subdiaphanâ; anfractibus numerosis, planatis, apice albo, tortuo, ultimo anfractu ovali; aperturâ ovali, columellâ crassâ.*

THE SHARP-POINTED EULIMA. Shell subcylindrical, white banded with pale-fawn, rather transparent; whorls numerous, flat, apex white, twisted, the last whorl oval; aperture oval, columella thick.

PEASE, Pro. Zool. Soc. 1860.

Hab. Sandwich Islands.

Of a rather cylindrical form, and slightly banded on the upper whorls.

Species 37. (Mus. Cuming.)

EULIMA RUTILA. *Eul. testâ tenui, vitreâ, pyramidatâ, apice attenuato; anfractibus decem, rufo pallidè fasciatis; aperturâ oblongâ, ovatâ.*

THE REFULGENT EULIMA. Shell thin, glassy, pyramidal, apex attenuated; whorls ten, banded with pale-red; aperture oblong-ovate.

CARPENTER.

Hab. Monterey.

Resembling *E. vitrea*, but peculiarly attenuated at the upper end.

Species 38. (Mus. Cuming.)

EULIMA ADAMSII. *Eul. testâ albâ, opacâ, breviusculâ, subventricosâ; anfractibus paucis, paululum convexis, ultimo subovali, aperturâ ovali, labro supernè subincurvo.*

ADAMS'S EULIMA. Shell white, opake, rather short, rather ventricose; whorls few, rather convex, the last rather oval; aperture oval, outer lip slightly curved inwards above.

SOWERBY.

E. nitida, A. Adams.

Hab. Singapore.

The latter name was previously applied to another species by Lamarck.

Species 39. (Mus. Cuming.)

EULIMA ROSEA. *Eul. testâ conicâ, solidâ, roseo-fulvescente; anfractibus septem, rotundatis; aperturâ subrotundâ.*

THE ROSY EULIMA. Shell conical, solid, rosy-brown; whorls seven, rounded; aperture rather round.

PEASE, Pro. Zool. Soc. 1860.

Hab. Sandwich Islands.

This species differs from *E. nitidula* in being decidedly more conical in shape.

Species 40. (Mus. Cuming.)

EULIMA FULVESCENS. *Eul. testâ parvâ, fulvâ, hyalinâ,*

brevi, ventricosâ; anfractibus paucis, rotundis, apice mucronato; aperturâ ovatâ, lateraliter productâ, columellâ et labro vix incrassatis.

The brownish Eulima. Shell small, light-brown, hyaline, short, ventricose; whorls few, rounded, apex mucronate; aperture ovate, laterally produced, columella and outer lip scarcely thickened.

A. Adams.

Hab. Isle of Labuan; Dr. Trail.

The aperture of this short, ventricose little shell, is laterally produced.

Species 41. (Mus. Cuming.)

Eulima parva. *Eul. testâ minutissimâ, albâ, subpellucidâ, medio arcuatâ, apice distortâ, anfractu ultimo ovato; aperturâ ovali.*

The little Eulima. Shell very minute, white, rather pellucid, arched in the centre, apex distorted, last whorl ovate; aperture oval.

Sowerby.

Hab. Mazatlan.

A very minute, distorted, white species.

42.

43.

44.

45.a.

46.a.

46.b.

45.b.

47.a.

47.b.

48.

EULIMA.

PLATE VI.

Species 42. (Mus. Angas.)

EULIMA MUCRONATA. *Eul. testâ cylindricâ, pellucidâ, angustatâ; anfractibus septem, planis, et tribus apicalibus subito contractis, mucronatis, ultimo oblongo; aperturâ subpyriformi, infrà rotundo, columellâ obliquâ, subtortuâ, labro tenui.*

THE MUCRONATE EULIMA. Shell cylindrical, pellucid, narrow; whorls seven, flat, and three apical ones suddenly contracted, mucronate, the last oblong; aperture subpyriform, rounded below, columella oblique, slightly tortuous, outer lip thin.

SOWERBY.

Hab. Port Jackson, New South Wales; J. F. Angas.

Species 43. (Mus. Cuming.)

EULIMA SUBROSTRATA. *Eul. testâ parvâ, albâ, angustâ, pyramidatâ, prope apicem attenuatâ, arcuata; anfractibus paucis, ultimo oblongo, subangulato; aperturâ oblongâ, infrà acuminatâ, columellâ rectiusculâ, labro tenui.*

THE SUBROSTRATE EULIMA. Shell small, white, narrow, tapering, near the apex arched and attenuated; whorls few, the last oblong, slightly angular; aperture oblong, acuminated beneath, columella rather straight, outer lip thin.

SOWERBY.

Hab. ——?

The aperture of this little species is produced and pointed at the end.

Species 44. (Mus. Cuming.)

EULIMA CONICA. *Eul. testâ parvâ, albâ, solidâ, pyramidâ, rectiusculâ; anfractibus brevibus, planatis, ultimo angulato, apice acuto, vix arcuato, suturâ distinctâ; aperturâ parvâ, subquadratâ, infrà acuminatâ, labro crasso, columellâ subtortuâ.*

THE CONICAL EULIMA. Shell small, white, solid, pyramidal, rather straight; whorls short, flat, the last angulated, apex sharp, scarcely arched, suture distinct; aperture small, rather square, acuminated beneath, outer lip thick, columella rather tortuous.

SOWERBY.

Hab. ——?

This little shell differs from *E. polygyra* in the lower part of the aperture being acuminated. It is also more solid, and the whorls are not quite so short.

Species 45. (Fig. *a*, *b*, Mus. Angas.)

EULIMA PICTA. *Eul. testâ solidâ, pallidè fulvâ, pyramidali; anfractibus undecim, convexiusculis, apicalibus albis, rotundis, ultimo obtusissimè angulato, supra angulum fasciâ roseâ interruptâ pictâ; aperturâ pyriformi.*

THE PAINTED EULIMA. Shell solid, pale-fawn, pyramidal; whorls eleven, rather convex, those near the apex white, round, the last very obtusely angular, above the angle painted with a rose-coloured, interrupted band; aperture pyriform.

SOWERBY.

Hab. ——?

A beautiful species distinguished by a pale band of pink on the last whorl, which is condensed into a spot near the central varix on the back and front.

Species 46. (Fig. *a*, *b*, Mus. Angas.)

EULIMA ATTENUATA. *Eul. testâ elongatâ, subcylindricâ, angustâ, semipellucidâ, albâ, pallidè fasciatâ; anfractibus tredecim, planis, ultimo oblongo, apice mucronato; aperturâ angustâ, labro medio producto, infrà subemarginato, columellâ obliquâ, angustissimâ.*

THE ATTENUATED EULIMA. Shell elongated, subcylindrical, narrow, semipellucid, white, faintly banded; whorls thirteen, flat, the last oblong, apex mucronate; aperture narrow, outer lip produced in the middle, subemarginated beneath; columella oblique, very narrow.

SOWERBY.

Hab. Fiji Islands.

More attenuated than *E. aciculata*, Pease.

Species 47. (Fig. *a*, *b*, Mus. Angas.)

EULIMA AUGUR. *Eul. testâ albâ, opacâ, solidâ, obtusâ, oblongâ, prope apicem vix tortuâ; anfractibus decem, subventricosis, ultimo rotundo; aperturâ ovali, labro medio producto, columellâ rectiusculâ.*

THE AUGUR EULIMA. Shell white, opake, solid, obtuse, oblong, very slightly tortuous near the apex; whorls ten, subventricose, the last rounded; aperture oval, outer lip produced in the centre, columella rather straight.

ANGAS, Zool. Proc. 1865, p. 56.

Hab. St. Vincent's Gulf, South Australia.

Species 48. (Mus. Angas.)

EULIMA PROXIMA. *Eul. testâ solidâ, albâ, opacâ, nitidâ, pyramidali, retrorsum arcuatâ; anfractibus undecim, planis, ultimo obscurè angulato, suturâ distinctâ; aperturâ ovali, labro medio producto, columellâ rectiusculâ, crassâ.*

THE PROXIMATE EULIMA. Shell solid, white, opake, shining, pyramidal, arched backwards; whorls eleven, flat, the last obscurely angular, suture distinct, aperture oval, outer lip produced in the centre, columella rather straight, thick.

SOWERBY.

Hab. Port Jackson, New South Wales.

Less solid than *E. polita*, with the suture more distinct, and the body-whorl more angular.

EULIMA.

	Plate.	Species.
aciculata, *Pease*	V.	36
acuta, *Sowerby*	II.	15
Adamsii, *Sowerby*	V.	38
albus, Donovan	II.	16
anglica, Sowerby	II.	16
arcuata, *Sowerby*	II.	14
articulata, *Sowerby*	I.	1
attenuata, *Sowerby*	VI.	46
augur, *Angas*	VI.	47
Boscii, Payraudeau	II.	16
brevis, *Sowerby*	IV.	27
conica, *Sowerby*	VI.	44
conoidalis, *Sowerby*	III.	22
Cumingii, *A. Adams*	I.	8
cuspidata, *A. Adams*	III.	17
distorta, *Deshayes*	IV.	29
flexuosa, *A. Adams*	I.	7
fulvescens, *A. Adams*	V.	40
gracillima, *Sowerby*	IV.	32
grandis, *A. Adams*	I.	4
hastata, *Sowerby*	II.	9
iota, *C. B. Adams*	V.	34
labiosa, *Sowerby*	II.	10
lactea, *A. Adams*	I.	2
major, *Sowerby*	I.	5
Martinii, *A. Adams*	I.	6
micans, *Carpenter*	IV.	33
nitida, *Lamarck*	IV.	26
nitida, A. Adams	V.	38
nitidula, *Pease*	V.	35
mucronata, *Sowerby*	VI.	42
obesula, *A. Adams*	IV.	28
opaca, *Sowerby*	IV.	30
parva, *Sowerby*	V.	41
picta, *Sowerby*	VI.	45
polita, *Linnæus*	II.	16
polygyra, *A. Adams*	III.	24
porcellana, *Sowerby*	II.	11
proxima, *Sowerby*	VI.	48
pusilla, *Sowerby*	III.	25
pyramidalis, *A. Adams*	III.	23
retrorsa, *Sowerby*	IV.	31
rosea, *Pease*	V.	39
rutila, *Carpenter*	V.	37
Sandvichensis, *Sowerby*	III.	21
solida, *Sowerby*	III.	18
subangulata, *Sowerby*	II.	13
subrostrata, *Sowerby*	VI.	43
subpellucida, *Pease*	III.	20
teinostoma, *A. Adams*	I.	3
tortuosa, *Adams and Reeve*	II.	12
vitrea, *A. Adams*	III.	19

1.a.

1.b.

1.c.

2.

3.

4.

5.

Sowerby, del. et lith.

Vincent Brooks, Imp.

VERTAGUS.

PLATE I.

Genus VERTAGUS, Klein.

Testa marina, turrita, irregulariter varicosa, longitudinaliter plicata, seu tuberculata; anfractibus numerosis, gradatim crescentibus, aperturâ supernè in canalem contractâ, columellâ nonnunquam intus plicatâ, margine tumido, posticè calloso, canali retrorso; operculo corneo, ovali, paucispirali.

Shell marine, turreted, irregularly varicose, longitudinally plicated or tuberculated; whorls numerous, gradually increasing; aperture contracted above into a canal, columella sometimes plaited within, margin tumid, callous at the back, canal bent backwards; operculum horny, oval, with few whorls.

The shells of this genus are not essentially different from true *Cerithia*, the plait on the inner part of the columella appearing only in some of the species. The canaliferous tube being bent over the back is the principal distinguishing character. Of the twenty-six species here described, four or five only are new since the monograph by Sowerby. Like the *Cerithia*, their geographical distribution is very wide,—China, Australia, Sandwich Islands, Borneo, the Philippines, Panama, and other places, being represented by shells included in this small number of species.

Species 1. (Fig. *a*, *b*, Mus. Cuming.)

VERTAGUS CEDO-NULLI. *Ver. testâ breviusculâ, medio ventricosâ, albidâ vel griseâ, fusco seu nigro maculatâ, spiraliter striatâ et nodulis moniliformibus seriatim cinctâ; anfractibus subventricosis, prope angulum tuberculis magnis, validè extantibus coronatis; aperturâ breviusculâ, columellâ crassâ, obliquâ, intus biplicatâ, canali validè recurvo, labro crenulato.*

THE INVINCIBLE VERTAGUS. Shell rather short, ventricose in the middle, white or grey, spotted with brown or black, spirally striated and girt with bead-like nodules in rows; whorls rather ventricose, coronated near the suture with large, prominent tubercles; aperture rather short, columella thick, oblique, with two inner plaits, canal strongly recurved, outer lip crenulated.

SOWERBY, Thes. Conch. Cerithium, sp. 14. f. 38, 39, 40.

Hab. Borneo; Lieut. Tayler, R.N.

Besides the proportionate shortness of the shells of this species, and their less pyramidal form as compared with *V. obeliscus*, they differ in the peculiar sharpness of their sculpture.

Species 2. (Mus. Cuming.)

VERTAGUS MACULOSUS. *Ver. testâ, magnâ, solidâ, albâ, maculis et strigis fuscis variegatâ, spiraliter sulcis duplicatis subdistantibus cinctâ; anfractibus superioribus distanter validè plicatis, inferioribus inter sulcos nodulosis; aperturâ magnâ, subquadratâ, labro expanso, elevato, laqueato, anticè subdenticulato, canali elongato, labio columellari expanso.*

THE SPOTTED VERTAGUS. Shell large, solid, white, variegated with brown spots and stripes, spirally girt with rather distant ribs in pairs; the upper whorls distantly and strongly plaited, the lower ones with nodules between the sulci; aperture large, rather square, outer lip expanded, raised, fluted, rather denticulated in front, canal long, outer lip expanded.

MARTYN (*Clava maculosa*), Univ. Conch. p. 57.

Cerithium clava, Bruguière.

Cerithium marmoreum, Kiener.

Hab. Galapagos Islands.

With the exception of *Telescopium læve*, this is the largest of the recent *Cerithiadæ*. The upper whorls are characterized by rather distant, solid ribs, and in the lower ones these ribs are broken up into nodules on the interstices of the sulci.

Species 3. (Mus. Cuming.)

VERTAGUS ALUCO. *Ver. testâ solidâ, medio ventricosâ, sublævigatâ, rubescenti maculis castaneis vel nigrescentibus, aliis parvis aliis magnis, variegatâ; anfractibus supremis angulatis cancellatis, medianis supernè subangulatis, ad angulum tuberculis magnis, distantibus, subarcuatis, elevatis, armatis, ultimo subcomplanato, lateraliter tumido; aperturâ subovali, productâ, expansâ, labro arcuato, super columellam producto, canali elongato.*

THE OWL VERTAGUS. Shell solid, ventricose in the middle, rather smooth, reddish, varied with chestnut

or blackish spots, some large and others small; highest whorls angular and cancellated, middle whorls slightly angulated above, armed with large, distant, rather arched, upturned tubercles; the last rather flat, with a lateral swelling; aperture rather oval, produced, expanded, outer lip arched, produced over the columella, canal long.

Linnæus (*Murex*).

Murex coronatus, Born.

Hab. Philippines; Cuming.

The upper whorls of this well-known shell are angular and cancellated, and the large, distant tubercles on the upper part of the middle whorl are pointed upward in a peculiar manner.

Species 4. (Mus. Cuming.)

Vertagus Sowerbii. *Ver. testâ solidâ, pyramidali, subventricosâ, lævigatâ, rubescenti, lineis albis spiralibus inter maculas parvas lineares et quadratis tessellatâ, maculis magnis nigris raris pictâ; anfractibus supremis angulatis, cancellatis, medianis supernè subangulatis, ultimis inermibus; aperturâ subrotundâ, labro expanso, crenulato, super columellam producto, columellâ brevi, laminatâ, canali elongato, valde recurvo.*

Sowerby's Vertagus. Shell solid, pyramidal, rather ventricose, smooth, reddish, tessellated with spiral white lines between linear and square small spots, painted with few large black patches; upper whorls angulated, cancellated, the middle ones slightly angulated above, the last plain; aperture rather round, outer lip expanded, crenulated, produced over the columella, columella short, laminated, canal elongated, much recurved.

Kiener, Sp. Coq. Viv. pl. vii. f. 2.

Cerithium clava, Sowerby.

Hab. Philippines.

A more solid and pyramidal shell than *V. aluco*. From its form it was believed by the late Mr. Sowerby to represent the *Cerithium clava*, which had been previously named *C. maculosum*. The latter shell being now identified, M. Kiener found it necessary to adopt the present name for our shell.

Species 5. (Mus. Cuming.)

Vertagus gemmatus. *Ver. testâ acutè pyramidali, fulvâ, spiraliter impresso-lineatâ; anfractibus inter lineas tuberculatis, supernè prope suturam angulatis, tuberculis majoribus, inter-maculatis cinctis, ultimo anfractu magno, subcompresso, latere sinistro tumido; aperturâ subquadratâ, labro tumido, supernè ad spiram elevato, margine crenato, columella suprà tumidâ, infrà laminosâ, canali brevi, rectiusculo, aperto.*

The gemmed Vertagus. Shell acutely pyramidal, brown, spirally girt with impressed lines; whorls tuberculated between the lines, angulated above near the suture, and girt with larger tubercles, spotted between, the last whorl rather flattened, tumid on the left side; aperture rather square, outer lip tumid, elevated towards the spire, its margin crenated, columella tumid above, laminar beneath; canal short, rather straight, open.

Hinds, Voyage of Sulphur, pl. xi. f. 5, 6.

Hab. Panama.

7.a.

6.

8.

7.b.

9.a.

10.

9.b.

Sowerby, del et lith.

Vincent Brooks, Imp.

VERTAGUS.

PLATE II.

Species 6. (Mus. Cuming.)

VERTAGUS GRANIFERUS. *Ver. testâ fulvâ, pyramidatâ, fusiformi, irregulariter varicosâ, longitudinaliter plicatâ, spiraliter striatâ, plicis tuberculiferis; anfractibus ventricosis, ultimo fusiformi; aperturâ ovali, canali postico parvo, tubo canalifero antico, elongato, paulo recurvo, labro inflexo, tuberculifero.*

THE GRAINED VERTAGUS. Shell fulvous, pyramidal, subfusiform, irregularly varicose, longitudinally plicated, spirally striated, plaits tuberculated; whorls ventricose, the last fusiform; aperture ovate, posterior canal small, canal-tube long, a little recurved, outer lip inflected, tuberculated.

PEASE.

Hab. Sandwich Islands.

This small, fox-brown shell is scarcely characteristic of the genus, the canal-tube being only slightly recurved.

Species 7. (Fig. *a*, *b*, Mus. Cuming.)

VERTAGUS OBELISCUS. *Ver. testâ pyramidatâ, ad basin latâ, turritâ, ventricosâ, griseâ vel fulvâ, castaneo nebulatâ, rubro vel nigro maculatâ et punctatâ; anfractibus rectis, prope suturam angulatis, tuberculatis, costellis tribus moniliferis infra angulum cinctis, ultimo lateraliter univaricoso; aperturâ subquadratâ, posticè callo magno, columellâ anticè laminatâ, intus obscurè biplicato, tubo canalifero valde retrorso, labro punctato rotundo, versus canalem producto.*

THE OBELISK VERTAGUS. Shell pyramidal, wide at the base, turreted, ventricose, grey or brown, clouded with chestnut, spotted and dotted with red or black; whorls straight, angular near the suture, tuberculated, girt with three beaded ribs below the angle, the last with a single lateral varix; aperture rather square, with a large posterior callus, columella laminated in front, within obscurely two-plaited, canal-tube strongly recurved, outer lip spotted, round, produced towards the canal.

BRUGUIÈRE, Enc. Méth. pl. 443. f. 4 *a*, *b*.

Murex sinensis, Gmelin.

Hab. East Indies.

This well-known species is subject to several marked variations in sculpturing and colouring.

Species 8. (Mus. Cuming.)

VERTAGUS NOBILIS. *Ver. testâ solidâ, elongatâ, pallidâ, longitudinaliter fasciis obscurè fulvis, undatis strigatâ, spiraliter lineis elevatis cinctâ; anfractibus numerosis, superioribus angulatis, cancellatis, medianis et inferioribus lævibus, planatis, ad suturam subtumidis; aperturâ subquadratâ, albâ, canali postico magno, callo magno, columellâ tortuosâ, tubo canalifero producto, labro crasso, anticè rotundo, trans canalem productâ.*

THE NOBLE VERTAGUS. Shell solid, elongated, pale, longitudinally striped with obscurely-fulvous, waved bands, spirally girt with elevated lines; whorls numerous, the upper ones angular, cancellated, central and lower, smooth, flat, tumid at the suture; aperture rather square, white, with the posterior canal large, callus large, columella tortuous, canal-tube produced; outer lip thick, rounded in front, produced across the canal.

REEVE, Conch. System.

Hab. Mindanao, Philippines; Cuming.

A magnificent example of this truly noble *Vertagus*, defective only on the back of some of the whorls, was purchased by Mr. Sowerby at the recent sale of Mr. Cuming's stock.

Species 9. (Fig. *a*, *b*, Mus. Cuming.)

VERTAGUS FASCIATUS. *Ver. testâ elongatâ, subpyramidatâ, lævi, albâ, nonnunquam fusco fasciatâ, plus minusve spiraliter sulcatâ; anfractibus paulo convexis, supernè plicatis; aperturâ obliquâ, columellâ biplicatâ, tubo canalifero tortuoso, obliquo, leviter retrorso, labro crasso.*

THE BANDED VERTAGUS. Shell elongate, subpyramidal, smooth, white, sometimes banded with brown, more or less spirally sulcated; whorls a little convex, plaited above; aperture oblique, columella two-plaited, canal-tube tortuous, oblique, slightly turned backwards, outer lip thick.

BRUGUIÈRE, Enc. Méth. p. 474.

C. procerum, Kiener.

Hab. Indian Seas and Philippines.

The difference between this species and *V. Martinianus* is in the colouring, which in the former is disposed in bands, and in the latter in spots and flame-like markings.

Species 10. (Mus. Cuming.)

Vertagus semigranosus. *Ver. testâ subcylindricâ, turritâ, spiraliter striatâ, albâ, fusco maculatâ, varicibus albis; anfractibus rectiusculis, ad suturam suprà distanter nodulosis, infrà seriebus duabus nodulorum cinctis, ultimo seriebus nodulorum tribus, inter nodulos castaneo punctatis; aperturâ obliquâ, canali postico parvo, columellâ obscurè biplicatâ, tubo canalifero valde retrorso.*

The half-grained Vertagus. Shell subcylindrical, turreted, spirally striated, white, brown-spotted, varices white; whorls rather straight, with distant nodules above at the suture, below girt with two series of nodules, the last with three series, spotted with chestnut between the nodules; aperture oblique, the posterior canal small, columella obscurely biplicate, canal-tube strongly recurved.

Lamarck, Anim. sans vert. Cerithium, no. 18.

Hab. New Holland.

11.

12.

14a.

13.

15a.

14b.

15b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

VERTAGUS.

PLATE III.

Species 11. (Mus. Cuming.)

VERTAGUS GRANIFERUS. *Ver. testâ pallidè fulvâ, fusco pallido diffusâ et inter nodulos maculatâ, subcylindricâ, angustâ; anfractibus numerosis, subinflatis, supernè prope suturam costâ tuberculatâ spiraliter marginatâ, tum costis duabus graniferis distantibus et infrà unâ proximâ cinctis, interstitiis striatis, ultimo anfractu infrà subrotundo granifero; aperturâ obliquâ, columellâ laminatâ, intus uniplicatâ, canali brevi.*

THE GRAINED VERTAGUS. Shell pale-fawn, suffused with pale-brown, and spotted between the nodules, cylindrical, narrow; whorls numerous, slightly inflated, above near the suture bordered with a tuberculated rib, then surrounded with two distant, granulated ribs, one approximate beneath, interstices striated, the last whorl rounded and granulated beneath; aperture oblique, columella laminated, uniplicate within, canal short.

PEASE.

Hab. Sandwich Islands.

This pretty little shell resembles *V. Kochii*, but it is more finely and uniformly granulated throughout.

Species 12. (Mus. Cuming.)

VERTAGUS ATTENUATUS. *Ver. testâ elongato-turritâ, albidâ, rufo maculatâ; anfractibus planiusculis, liris granosis majoribus et lævibus minoribus alternatim cinctis; aperturâ obliquâ, labro crenato, columellâ laminatâ, supernè plicatâ, canali angustâ, elongatâ, obliquâ.*

THE ATTENUATED VERTAGUS. Shell lengthened, turreted, whitish, spotted with reddish-brown; whorls rather flat, girt with large, granulated, and with small, smooth ribs alternately; aperture oblique, outer lip crenated, columella laminated, plicated above, canal narrow, elongated, oblique.

PHILIPPI, Abbildungen, t. i. f. 2.

Cerithium longicaudatum, Reeve and Adams.

Hab. Philippines.

The canal of this species is only slightly bent backwards.

Species 13. (Mus. Cuming.)

VERTAGUS PHAROS. *Ver. testâ elongatâ, angustâ, lævi, albidâ, fusco spiraliter tæniatâ, spiraliter distanter sulcatâ; anfractibus longitudinaliter supernè costatis, ad marginem superiorem crenulatis; aperturâ obliquâ, labro laqueato, canali obliquo, tortuo, elongato, retrorso, columellâ crassâ, prope marginem unituberculatâ, intus uniplicatâ.*

THE PHAROS VERTAGUS. Shell elongate, narrow, smooth, whitish, spirally ribanded with brown, spirally distantly sulcated; whorls longitudinally ribbed above, crenulated at the upper margin; aperture oblique, outer lip fluted, canal oblique, tortuous, elongated, curved backwards, columella thick, with one tubercle near the margin, and one plait within.

HINDS, Moll. Voy. Sulphur, p. 27. pl. xi. f. 3, 4.

Hab. East Coast of Africa.

Narrower and smaller than *V. fasciatus*, the ribs and marginal crenulations sharper and deeper.

Species 14. (Fig. *a*, *b*, Mus. Cuming.)

VERTAGUS MARTINIANUS. *Ver. testâ oblongâ, subcylindraceâ, lævi, albâ, fusco seriatim maculatâ vel longitudinaliter fasciatâ, spiraliter sulcatâ; anfractibus paulo convexis, supernè plicatis; aperturâ obliquâ, columellâ uniplicatâ, medio tumido, canali tortuo obliquo, retrorso, labro crasso.*

MARTIN'S VERTAGUS. Shell oblong, subcylindrical, smooth, white, spotted in rows or longitudinal bands of brown, spirally sulcated; whorls slightly convex, plicated above; aperture oblique, columella with one fold, tumid in the middle, canal tortuous, oblique, bent backwards, outer lip thick.

PFEIFFER, Register.

Hab. —— ?

The character of the markings in this species differs from that of *V. fasciatus* in being vertical instead of spiral in direction, and this difference being constant, may be useful as a special distinction for conventional purposes.

Species 15. (Fig. *a*, *b*, Mus. Cuming.)

VERTAGUS LINEATUS. *Ver. testâ oblongâ, subventricosâ, albâ, rubro spiraliter lineatâ; anfractibus spiraliter distanter liratis et longitudinaliter costatis, liris super costas in tuberculis acutis productis; aperturâ ovali, obliquâ, labro crenato, acutè spinoso, columellâ crassâ, laminatâ, intus medio uniplicato; canali obliquè recurvo.*

THE LINEATED VERTAGUS. Shell oblong, rather ventricose, white, spirally lineated with red; whorls spirally, distantly ridged, and longitudinally ribbed, ridges produced into sharp tubercles upon the ribs; aperture oval, oblique, outer lip crenated, acutely spinose, columella thick, laminated in the centre within single-plaited, canal obliquely recurved.

BRUGUIÈRE.

Hab. Pacific Ocean.

The shell represented by Fig. *b* is very characteristic of the species, but Fig. *a* is not so easy to identify, its sculpture putting one a little more in mind of *V. Pharos*.

17.a.

16.a.

17.b.

18.

19.

16.b.

20.

Sowerby, del. et lith.

Vincent Brooks, Imp.

VERTAGUS.

PLATE IV.

Species 16. (Fig. *a*, *b*.)

VERTAGUS ARTICULATUS. *Ver. testâ pyramidali, turritâ, fulvâ, fusco maculatâ; anfractibus numerosis, planulatis, supernè subangulatis, ad suturam tuberculatis, medio costis inæqualibus moniliferis angulatis cinctis, ultimo dorso ad medium elevato; aperturâ obliquâ, labro ad spiram elevato, columellâ anticè laminatâ, canali valdè retrorso.*

THE ARTICULATED VERTAGUS. Shell pyramidal, turreted, light-brown, spotted with dark; whorls numerous, rather flat, slightly angulated above, tuberculated at the suture, girt in the middle with beaded angular ribs, the back of the last elevated in the centre; aperture oblique, outer lip raised at the spire, columella laminated in front, canal bent strongly backwards.

A. ADAMS and REEVE.

Hab. East Indian Archipelago.

Species 17. (Fig. *a*, *b*.)

VERTAGUS BITUBERCULATUS. *Ver. testâ pupæformi, albidâ, tenuissimè striatâ; anfractibus supernè tuberculis magnis duplicatis armatis, infra costâ moniliferâ cinctis (ultimo tribus); aperturâ obliquâ, columellâ obscurè uniplicatâ, ad marginem laminatâ, canali valdè retrorso.*

THE BITUBERCULATED VERTAGUS. Shell pupiform, whitish, very finely striated; whorls armed above with large doubled tubercles, girt beneath with a beaded rib; aperture oblique, columella obscurely uniplicate, laminated at the margin, canal strongly recurved.

SOWERBY.

Hab. Australia.

The large double tubercles on the upper part of the whorls in this shell serve to distinguish it from all others of the group to which it belongs.

Species 18. (Mus. Cuming.)

VERTAGUS CUMINGII. *Ver. testâ ventricosâ, lævi, solidâ, albidâ, maculis strigisque inæqualibus rubro nigrescentibus pictâ; anfractibus paulo convexis, superioribus tuberculatis et cancellatis; aperturâ ovali, columellâ posticè uniplicatâ, labro expanso, arcuato, margine crenulato, canali valdè retrorso.*

CUMING'S VERTAGUS. Shell ventricose, smooth, solid, white, painted with unequal blackish-red spots and stripes; whorls slightly convex, the upper one tuberculated and cancellated; aperture oval, columella with one plait at the back, outer lip expanded, curved, with crenulated margin, canal strongly recurved.

A. ADAMS.

Hab. Torres Straits.

Although this species belongs to the same group with *V. aluco* and *V. Sowerbii*, the differences will be perceived at a glance.

Species 19. (Mus. Cuming.)

VERTAGUS VULGARIS. *Ver. testâ ventricosâ, solidâ, pallidè fulvâ; anfractibus longitudinaliter plicatis, plicis validis, magnis, incisis, infra subevanidis, ultimo anfractu subdepresso; aperturâ obliquâ, angustâ, labio interno crasso, calloso, columellâ uniplicato, canali breviusculo, leviter retrorso.*

THE COMMON VERTAGUS. Shell ventricose, solid, pale-fawn; whorls longitudinally plaited, plaits strong, large, incised, partly disappearing beneath, last whorl rather depressed; aperture oblique, narrow, inner lip thick, callous, columella with a plait, canal rather short, slightly recurved.

SCHUMACHER.

Cerithium Vertagus, Linnæus.

Hab. Moluccas and Philippines.

Species 20. (Mus. Cuming.)

VERTAGUS PULCHER. *Ver. testâ pyramidali, solidâ, pallidâ, ad suturam perelevatim nodulosâ, inter nodulos nigro maculatâ, omnino minutè granosâ et cancellatâ; aperturâ brevi, labio interno uniplicato, anticè laminato, labro arcuato, canali abruptè ad dorsum reflexo.*

THE BEAUTIFUL VERTAGUS. Shell pyramidal, solid, pale, with strongly raised nodules at the suture, spotted with black between the nodules, all over minutely granulated and cancellated; aperture short, inner lip one-plaited, laminated in front, outer lip arched, canal abruptly turned up to the back.

A. ADAMS.

Hab. N. Australia.

A very beautiful shell, resembling *V. obeliscus*. It is minutely cancellated in every part, and a black spot between each of the nodules.

21.

22.a.

22.b.

23.

24.a.

24.b.

25.a.

26.a.

26.b.

25.b.

Sowerby, del. et lith.

Vincent, Brooks, Imp.

VERTAGUS.

PLATE V.

Species 21.

VERTAGUS ASPER. *Ver. testâ oblongâ, albâ, longitudinaliter plicatâ, plicis numerosis, acutè serratis; aperturâ ovali, obliquâ, labio interno posticè uniplicato, in medio intus obliquè biplicato, labro serrato, canali recurvo.*

THE ROUGH VERTAGUS. Shell oblong, white, longitudinally plaited, plaits numerous, acutely serrated; aperture oval, oblique, inner lip with a fold at the back, and two oblique plaits in the centre within, outer lip serrated, canal recurved.

LINNÆUS (*Murex*).

Clava rugata, Martyn.

Strombus viber, Gmelin.

Murex granulatus, Linnæus.

Hab. Isle of France; Pacific.

The several varieties of this characteristic species are narrower than *V. lineatus*, and their sculpture is much closer.

Species 22. (Fig. *a*, *b*, Mus. Cuming.)

VERTAGUS TENUI-SCULPTUS. *Ver. testâ pyramidali, acuminatâ, turritâ; anfractibus numerosis, supernè prope suturam angulatis et tuberculis magnis coronatis, infra triseriatim moniliferis; aperturâ ovali, supernè elevatâ, canaliferâ, labro crenulato, canali brevi.*

THE FINE-SCULPTURED VERTAGUS. Shell pyramidal, acuminated, turreted; whorls numerous, above, near the suture, angulated and crowned with large tubercles, below beaded in three rows; aperture oval, raised above, with a canal; outer lip crenulated, canal short.

SOWERBY.

Hab. Australia.

Resembling *V. gemmatus*, but the sculpture much finer.

Species 23. (Mus. Cuming.)

VERTAGUS RECURVUS. *Ver. testâ acuminatâ, albâ, fulvo vel rufo inter nodulis punctato; anfractibus duodecim, triseriatim granosis, ultimo costellis septem granosis ornato; aperturâ posticè canaliferâ, labio interno anticè incrassato, vix plicato, canali breviusculo recurvo.*

THE RECURVED VERTAGUS. Shell acumined, white, spotted with brown and red between the tubercles; whorls twelve, grained in three rows, the last ornamented with seven granulated ribs; aperture with a canal at the back, inner lip thickened in front, scarcely plaited, canal rather short, recurved.

SOWERBY.

Hab. Red Sea.

The fine specimen now figured has been acquired since the original specimen was described from a specimen whose locality was then unknown.

Species 24, *a*, *b*.

VERTAGUS SEMINUDUS. *Ver. testâ albâ, pyramidali, spiraliter sulcatâ; anfractibus supra medium angulatis, tuberculis magnis acutis triseriatim armatis, ultimo infra inermi; aperturâ subquadratâ, ad spiram elevatâ, labro intus crenulato, labio interno laminatâ, columellâ intus obscurè biplicato, canali validè ad dorsum recurvo.*

THE HALF-BARE VERTAGUS. Shell white, pyramidal, spirally sulcated; whorls angulated above the centre, armed with three series of large, sharp tubercles, the last without tubercles below; aperture subquadrate, elevated towards the spire, outer lip crenulated within, inner lip laminated, columella obscurely biplicated within, canal strongly recurved over the back.

SOWERBY.

Hab. New Caledonia.

This white shell is remarkable for its sculpture, having three rows of sharp, large tubercles on each whorl, the lower part of the last whorl being plain.

Species 25. (Fig. *a*, *b*, Mus. Cuming.)

VERTAGUS TORULOSUS. *Ver. testâ albidâ, ad apicem lividâ, costis noduliferis ornatâ; anfractibus ad suturam moniliferis, tumidis, spiraliter costatis; aperturâ subrotundâ, supernè canaliferâ; labro expanso, digituto, canali brevi.*

THE CORDED VERTAGUS. Shell whitish, livid at the

apex, ornamented with noduliferous ribs; whorls beaded and tumid at the suture, spirally ribbed; aperture rather round, with a canal above, outer lip expanded, digitated, canal short.

Linnæus (*Murex*).

Murex annulatus, Martyn.

Murex annularis, Gmelin.

Hab. Society Islands.

Variety Fig. 25 *b* is a frequently-occurring, irregular growth, peculiar to this species; it may be identified with the more regularly formed shell by the apex, which is characterized by broad ribs with livid-blue between them.

Species 26. (Fig. *a*, *b*, Mus. Cuming.)

Vertagus Kochii. *Ver. testâ angustâ, pallidâ, fusco vel rufo interlineatâ; anfractibus spiraliter costellatis, costellis alternatim granosis et planis; aperturâ subobliquâ, labro paulo incrassato, labio interno uniplicato, canali brevi, recurvo.*

Koch's Vertagus. Shell narrow, pale, interlined with brown or red; whorls spirally ribbed, ribs alternately granulated and plain; aperture rather oblique, outer lip a little thickened, inner lip with a single plait, canal short, recurved.

Philippi, Abbild. pl. i. f. 3.

Hab. East coasts of Africa.

VERTAGUS.

	Species	Plate.
aluco, *Linnæus*	I.	3
annularis, Gmelin	V.	25
annulatus, Martyn	V.	25
articulatus, *Adams and Reeve*	IV.	16
asper, *Linnæus*	V.	21
attenuatus, *Philippi*	III.	12
bituberculatus, *Sowerby*	IV.	17
cedo-nulli, *Sowerby*	I.	1
clava, Bruguière	I.	2
clava, Sowerby	I.	4
coronatus, Born	I.	3
Cumingii, *A. Adams*	IV.	18
fasciatus, *Bruguière*	II.	9
gemmatus, *Hinds*	I.	5
graniferus, Pease*	II.	6
graniferus, *Pease*	III.	11
Kochii, *Philippi*	V.	26
lineatus, *Bruguière*	III.	15
longicaudatum, Adams and Reeve	III.	12
maculosus, *Martyn*	I.	2
marmoreum, Kiener	I.	2
Martinianus, *Pfeiffer*	III.	14
nobilis, *Reeve*	II.	8
obeliscus, *Bruguière*	II.	7
Pharos, *Hinds*	III.	13
pulcher, *A. Adams*	IV.	20
ravidum, *Phil.**	II.	6
recurvus, *Sowerby*	V.	23
seminudus, *Sowerby*	V.	24
semigranosus, *Lamarck*	II.	10
sinensis, Gmelin	II.	7
Sowerbii, *Kiener*	I.	4
tenuisculptus, *Sowerby*	V.	22
torulosus, *Linnæus*	V.	25
Vertagus, Linnæus	IV.	19
vulgaris, *Schumacher*	IV.	19

* ERRATUM.—Plate II. Species 6, *for* VERTAGUS GRANIFERUS, *Pease*, read VERTAGUS RAVIDUM, *Phil.*

MONOGRAPH

OF THE GENUS

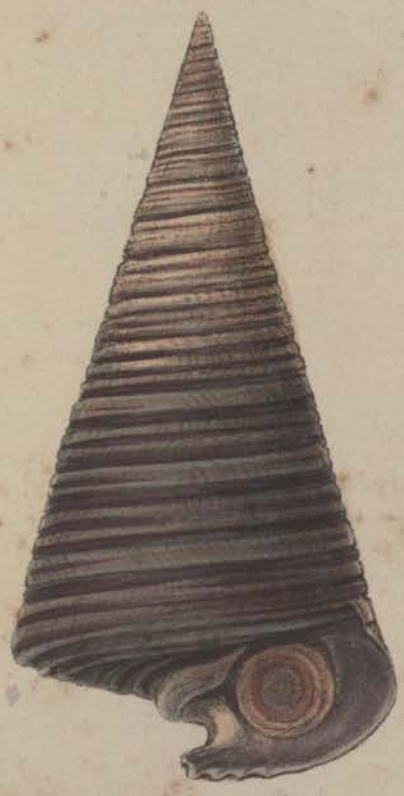
TELESCOPIUM.

"Nature's beauties, ever new,
In another glass I view;
Now I know their Maker too."

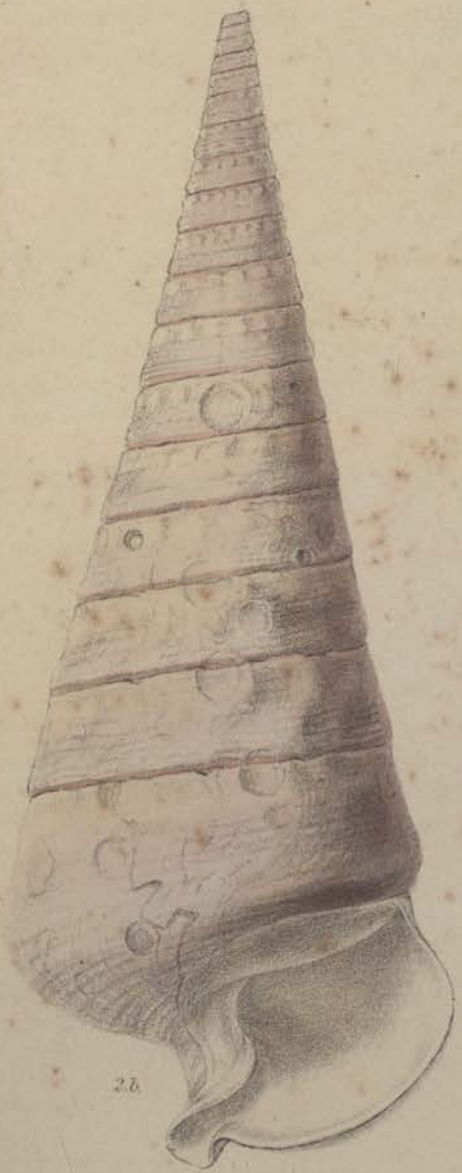
George Daniel.

2a.

2d.



2c.



2.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

TELESCOPIUM.

Genus TELESCOPIUM, Schumacher.

Testa conica, turrita; anfractibus numerosis, ultimo angulato; aperturâ brevi, in canalem brevem desinente, columellâ tortuâ, labro infrà valdè producto; operculo corneo, rotundo, multispirali.

Shell conical, turreted; whorls numerous, the last angulated; aperture short, ending in a short canal, columella tortuous, outer lip much produced in front; operculum horny, rounded, multispiral.

The type of this genus is the *T. fuscum*, which, in common with shells of the genera *Cerithidea*, *Potamides*, etc., have rounded, multispiral opercula; and, instead of being marine, like *Cerithium* proper and *Vertagus*, are frequenters of mouths of rivers and marshy grounds. The second species, *T. lævc*, has been associated with the first from the very similar form of the shell, the operculum being unknown. Mr. Hanley, however, possesses a specimen with an operculum, which, if authenticated as really belonging to it, would restore the species to *Cerithium* proper, being oval and pauci-spiral.

Species 1. (Mus. Sowerby.)

TELESCOPIUM FUSCUM. *Tel. testâ conicâ, latâ, fusco-nigricante, spiraliter profundè sulcatâ, inter sulcis planulatim costatâ; anfractibus numerosis, ultimo angulato, infrà planulato, prope aperturam spiraliter bicostato, columellâ obliquè tortuosâ, rubrâ, canali latè emarginato, labro supernè recedente, emarginato infrà validè producto.*

THE BROWN TELESCOPIUM. Shell conical, wide, blackish-brown, spirally deeply ribbed; whorls numerous, the last angular, flattened beneath, spirally bicostated near the aperture, columella obliquely tortuous, red, canal largely emarginated, outer lip receding, emarginated, above, much produced below.

SCHUMACHER.

Trochus telescopium, Linnæus.

Hab. East Indian Islands, near Calcutta, Borneo, etc.

This well-known trochiform shell has a rounded, many-whorled operculum. The animal inhabits swamps near the mouths of rivers.

Species 2. (Fig. *a*, *b*, Mus. Backhouse.)

TELESCOPIUM LÆVE. *Tel. testâ albâ, ventricosâ, spiraliter striatâ, pyramidali; anfractibus numerosis, supernè tuberculiferis, ultimo rotundatim angulato, infrà angulum subinflato; aperturâ obliquâ, canali valido, columellâ tortuâ, labro arcuato, infrà producto.*

THE SMOOTH TELESCOPIUM. Shell white, ventricose, spirally striated, pyramidal; whorls numerous, tuberculated above, the last roundly angulated, rather inflated beneath the angle; aperture oblique, canal distinct, columella tortuous, outer lip arched, produced beneath.

QUOY, Voy. Astrolabe, pl. liv. f. 1–3.

Hab. Australia.

Although bearing a general resemblance to the fossil *Cerithium gigas*, this species differs essentially from that shell. It is observable that the whorls of the young shell increase in size much less rapidly than the later whorls, and the tubercles are more distinctly marked.

MONOGRAPH

OF THE GENUS

CERITHIDEA.

"By the greatness and beauty of the creatures, proportionably the Maker of them is seen."

Book of Wisdom.

1.a.

2.

3.

4.a

5.

6.

4.b.

7.

8.

1.b.

Sowerby, del et lith.

Vincent Brooks, Imp.

CERITHIDEA.

PLATE I.

Genus CERITHIDEA, *Swainson.*

Testa pyramidalis, turrita, longitudinaliter plicata, spiraliter sulcata, irregulariter varicosa; anfractibus plus minusve rotundis; aperturâ rotundâ, columellâ tortuâ, brevi, canali circulari, brevissimo, labro expanso, sinuoso, ante canalem producto, rotundo; operculo rotundo, corneo, multispirali.

Shell pyramidal, turreted, longitudinally plaited, spirally sulcated, irregularly varicose; whorls more or less rounded; aperture round, columella tortuous, short, canal circular, very short, outer lip expanded, sinuous, produced in front of the canal, rounded; operculum round, horny, multispiral.

The mollusca belonging to this genus are amphibious in their habits. They frequent the mouths of rivers and the neighbourhoods of brackish water in mangrove swamps, crawling on stones and leaves, in various localities in distant parts of the world. Panama, Natal, China, Borneo, Australia, and the Philippines, with other places, are tributaries to this group. The shells of the various species, when placed together, have a generally conformable appearance, although it is difficult in this, as in other cases among these small generic divisions, to fix upon any one constant definable term of distinction. The columella is, however, always short and tortuous, the canal forms a semicircular sinus, with the expanded outer lip produced in front.

Species 1. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIDEA ALBO-NODOSA. *Cer. testâ pyramidatâ, crassâ, distanter et validè varicosâ, subglaucâ, cancellatâ; anfractibus numerosis subrotundis, varicibus crassis, albis; aperturâ subquadratâ, labro crasso.*

THE WHITE-VARICED CERITHIDEA. Shell pyramidal, thick, distantly and strongly varicose, somewhat glaucous, cancellated; whorls numerous, rounded, varices thick, white; aperture rather square, outer lip thick.

CARPENTER.

Hab. —— ?

Although much narrower than *Cerithidea varicosa*, with white varices, this may be only a variety of the latter.

Species 2. (Mus. Cuming.)

CERITHIDEA LAFONDII. *Cer. testâ tenui, pallidè cæruleâ, lævi, brevi; anfractibus rotundatis, undatim longitudinaliter costatis, ad suturam et infrà sulcatis; aperturâ rotundâ, fusco tæniatâ, labro planulatim expanso, anticè sinuoso, producto.*

LAFOND'S CERITHIDEA. Shell thin, pale-bluish, smooth, short; whorls rounded, with waved longitudinal ribs, sulcated at the suture and beneath; aperture round, banded with brown, outer lip flatly expanded, sinuous, produced in front.

MICHAUD, Kiener, Sp. Gen. Coq. pl. 24. f. 3.

Hab. Jamaica.

A smooth shell, with larger whorls than *C. costata*, with which it is associated in Mr. Sowerby's monograph.

Species 3.

CERITHIDEA TENUIS. *Cer. testâ tenui, turritâ, fuscâ; anfractibus rotundis, numerosis, longitudinaliter leviter plicatis, spiraliter ad suturam et infrà costatis, supernè striatis, costis nodosis; aperturâ rotundâ, margine reflexâ.*

THE THIN CERITHIDEA. Shell thin, turreted, brown; whorls round, numerous, longitudinally lightly plaited, spirally ribbed at and beneath the suture, and striated above, ribs nodose; aperture round, margin reflected.

PFEIFFER.

Hab. —— ?

Differing from *C. Lafondii* in being striated, and in the thin ribs being nodose.

Species 4. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIDEA OBTUSA. *Cer. testâ ventricosâ, spiraliter sulcatâ, longitudinaliter costatâ, costis noduliferis, sinuosis; anfractibus rotundis, inflatis, ultimo infrà angulato, striato, labro valde expanso subplanulato, ante canalem producto, apice frequenter deciduo.*

THE OBTUSE CERITHIDEA. Shell ventricose, spirally grooved, longitudinally ribbed, ribs noduliferous, sinuous; whorls round, inflated, the last angular and

striated beneath, outer lip much expanded, somewhat flattened, produced in front of the canal.

Wood, Supp. 4. pl. 4. f. 8.

Hab. Malacca.

This well-known shell frequently loses its apex.

Species 5. (Mus. Cuming.)

Cerithidea quadrata. *Cer. testâ pyramidali, fuscâ, spiraliter sulcatâ, longitudinaliter crebri-costatâ; anfractibus rectiusculis, ultimo infrà quadrato, labro expanso, antice producto.*

The square Cerithidea. Shell pyramidal, brown, spirally grooved, longitudinally closely ribbed; whorls rather straight, the last square beneath, outer lip expanded, produced in front.

Sowerby.

Hab. Malacca.

Species 6. (Mus. Cuming.)

Cerithidea Kieneri. *Cer. testâ pyramidatâ, fuscâ, spiraliter sulcatâ, longitudinaliter costatâ, costis distantibus nodulosis; anfractibus numerosis, rotundis, labro valde expanso, ante canalem producto.*

Kiener's Cerithidea. Shell pyramidal, brown, spirally grooved, longitudinally ribbed, ribs distant, nodulose; whorls numerous, rounded, outer lip much expanded, produced in front of the canal.

Hombron.

Hab. Philippines and Borneo.

This is a much narrower shell than *C. obtusa*, and the ribs are more distant.

Species 7. (Mus. Cuming.)

Cerithidea sacrata. *Cer. testâ fusco-nigrescenti, tenui, lævi, elongatâ; anfractibus numerosis, subrotundis, longitudinaliter costatis, spiraliter subsulcatis, medio albo-tæniatis, costis nodiferis, varice uno, laterali; aperturâ subquadratâ, labro crasso.*

The dedicated Cerithidea. Shell blackish-brown, thin, smooth, long; whorls numerous, rather rounded, longitudinally ribbed, spirally sulcated, with a white band in the middle, ribs nodulose, a single lateral varix; aperture subquadrate, outer lip thick.

Gould.

Hab. California.

This shell approximates nearly to *C. varicosa*, but it is not, like that species, strongly reticulated.

Species 8. (Mus. Cuming.)

Cerithidea Mazatlanica. *Cer. testâ nigrescenti, crassâ, liris spiralibus et costis nodulosis cancellatâ, univaricosâ; anfractibus subrotundis, medio fusco-tæniatis; aperturâ subpurpureâ, labro crasso, sinuato.*

The Mazatlan Cerithidea. Shell rather black, thick, cancellated with nodulose ribs and spiral ridges, with a single varix; whorls rather round, with a brown band in the middle; aperture rather purple, outer lip thick, sinuous.

Carpenter.

Hab. Mazatlan.

Small, and darkly coloured, with only one varix, but in general characters rather closely resembling *C. varicosa*, of which it is perhaps only a variety.

9.a.

10.

11.

12.a.

13.a.

13.b.

12.b.

14.a.

14.b.

b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

CERITHIDEA.

PLATE II.

Species 9. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIDEA AMBIGUA. *Cer. testâ pyramidali, acuminatâ, fuscâ, costis subnodosis arcuatis longitudinalibus ornatâ; anfractibus numerosis, rotundis, suturâ profundâ, ultimo anfractu infrà carinato; aperturâ parvâ, columellâ laminatâ, labro subexpanso, infrà producto.*

THE AMBIGUOUS CERITHIDEA. Shell pyramidal, acuminated, brown, with slightly nodose, arched, longitudinal ribs; whorls numerous, round, suture deep, last whorl keeled beneath; aperture small, columella laminar, outer lip somewhat expanded, produced beneath.

C. B. ADAMS, 'Shells of Jamaica.'

Hab. Jamaica.

Differing from *C. costata* in the ribs being nodulose.

Species 10. (Mus. Cuming.)

CERITHIDEA COSTATA. *Cer. testâ pyramidali, acuminatâ, nigrescente, costis lævibus arcuatis longitudinalibus ornatâ; anfractibus numerosis, rotundis, suturâ profundâ, ultimo anfractu infrà unicarinato; aperturâ parvâ, columellâ laminatâ, labro subexpanso, infrà producto.*

THE RIBBED CERITHIDEA. Shell pyramidal, acuminate, rather black, ornamented with smooth, arched, longitudinal ribs; whorls numerous, round, suture deep, last whorl keeled beneath; aperture small, columella laminar, outer lip somewhat expanded, produced beneath.

WOOD, Ind. Test. Strombus, sp. 43.

Hab. Jamaica.

The ribs in this species are plain, and not nodose, as in *C. ambigua*.

Species 11. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIDEA RISSOIDEA. *Cer. testâ pyramidali, fuscâ, costis subcæruleis longitudinalibus obliquis, eleganter arcuatis, infrà noduliferis, ornatâ; anfractibus convexis, infrà spiraliter costatis, suturâ profundâ; aperturâ rotundâ, fasciatâ, columellâ arcuatâ, labro crasso, expanso, ad basin producto, canali inconspicuo.*

THE RISSOA-SHAPED CERITHIDEA. Shell pyramidal, brown, ornamented with bluish, longitudinal, elegantly-curved, oblique ribs, which are noduliferous beneath; whorls convex, spirally ribbed beneath, suture deep; aperture rounded, banded, columella arched, outer lip thick, expanded, produced at the base, canal not conspicuous.

SOWERBY, Thesaurus, f. 289.

Cerithium crassilabrum, Krauss.

Hab. Port Natal.

The light-blue ribs are elegantly curved and regular.

Species 12. (Fig. *a*, Mus. Sowerby; Fig. *b*, Mus. Cuming.)

CERITHIDEA CHARBONNIERI. *Cer. testâ tenui, corneâ, fuscâ, pyramidali, lævi, longitudinaliter costatâ, costis lævibus, subdistantibus; anfractibus subplanatis, ultimo angulato-carinato, infrà spiraliter striato; aperturâ subquadratâ, infrà emarginatâ, columellâ brevi tenui, labro expanso, reflexo, infrà producto.*

CHARBONNIER'S CERITHIDEA. Shell thin, horny, brown, pyramidal, smooth, longitudinally ribbed, ribs smooth, rather distant; whorls rather flat, the last angulated, carinated, spirally striated beneath; aperture nearly square, emarginated beneath, columella short, thin, outer lip expanded, reflected, produced beneath.

PETIT, Journ. Conch. 1851.

Cerithium unicarinatum, Metcalfe.

Hab. Borneo.

A very distinct, light, horny species, with carinated whorls and square mouth.

Species 13. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIDEA RHIZOPERARUM. *Cer. testâ cylindricâ, solidiusculâ, costis tuberculatis longitudinalibus, paulo arcuatis et liris spiralibus cancellatâ; anfractibus unifasciatis, brevibus, ultimo angulato, subcarinato; aperturâ rotundâ, ad basin columellæ validè emarginatâ, labro expanso, infrà producto.*

THE CERITHIDEA OF THE MANGROVES. Shell cylindrical, rather solid, cancellated with longitudinal, tuberculated, slightly-arched ribs and spiral ridges; whorls short, single-banded, the last angular, slightly keeled; aperture rounded, strongly emarginated at the base of the columella, outer lip expanded, produced beneath.

A. ADAMS.

Hab. Borneo and Philippines, at the root of mangroves.

More cylindrical in form, with shorter whorls and closer sculpture than *C. decollata*, *C. obtusa*, etc.

Species 14. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIDEA DECOLLATA. *Cer. testâ pyramidatâ, fuscâ, nonnunquam rubro fasciatâ, longitudinaliter costatâ, inter costis spiraliter striatâ; anfractibus brevibus, apicalibus deciduis, ultimo rotundo; aperturâ rotundâ, labro tenui, expanso.*

THE DECOLLATED CERITHIDEA. Shell pyramidal, brown, sometimes banded with red, longitudinally ribbed, spirally striated between the ribs; whorls short, the upper ones deciduous, the last rounded; aperture round, outer lip thin, expanded.

LINNÆUS (*Murex*), Syst. Nat. ed. 12.

Turbo pulcher, Dilwyn.

Hab. —— ?

Variety Fig. *a* is of a light colour with two reddish bands on each whorl; Fig. *b* is dark-brown, with a lighter band towards the suture, in both the last whorl has the ribs obsolete.

15a.

16.b.

16.a.

15.b.

17.

18.

19.a.

20.

21.

19.b.

Sowerby, del. et lith.

Vincent Brooks, Imp.

CERITHIDEA.

PLATE III.

Species 15. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIDEA FORTUNEI. *Cer. testâ lævigatâ, subventricosâ, subcæruleâ, fusco fasciatâ, vel omnino fuscâ; anfractibus paucis, rotundis, longitudinaliter costatis, costis sinuatis, suturâ profundâ, ultimo anfractu lævissimo, infrà sulcato, labro vix incrassato, sinuato, infrà producto.*

FORTUNE'S CERITHIDEA. Shell smooth, subventricose, bluish, banded with brown, or all brown; whorls few, round, longitudinally ribbed, ribs sinuated, suture deep, last whorl very smooth, grooved beneath, outer lip not much thickened, sinuous, produced beneath.

ADAMS.

Cerithium Montagnei, var., Sowerby's Thesaurus.

Hab. Shanghai.

Much narrower than *C. Montagnei*, the ribs smoother, and the aperture much less expanded.

Species 16. (Fig. *a*, *b*, Mus. Hanley.)

CERITHIDEA HANLEYANA. *Cer. testâ parvâ, albâ, turritâ, solidâ; anfractibus novem, longitudinaliter costatis, suturâ excavatâ, costis numerosis biangulatis, medio depressis, arcuatis, interstitiis medio foveolatis, anfractu ultimo infrà unicarinato; aperturâ rotundâ, columellâ brevi, rectâ, canali inconspicuo, labro crasso, rotundo, sinuato, infra medium producto.*

HANLEY'S CERITHIDEA. Shell small, white, turreted, solid; whorls nine, longitudinally ribbed, suture excavated, ribs numerous, biangulated, depressed in the middle, arched, interstices with a pit in the middle, last whorl with a keel at the lower part; aperture round, columella short, straight, canal inconspicuous, outer lip thick, round, sinuous, produced below the middle.

SOWERBY.

Hab. ——?

A very curious little white shell, which appears to belong to this group, although the operculum is not known.

Species 17. (Mus. Cuming.)

CERITHIDEA SINENSIS. *Cer. testâ lævi, tenui, pyramidali, elongatâ, subglaucâ, supernè ad suturam fasciâ albâ, supra medium et infrà lineis rubris duabus cinctâ; anfractibus longitudinaliter costatis, suturâ uniliratâ, ultimo anfractu infrà subangulatâ, ad angulum obscurè unicarinato, costis vix arcuatis, lævibus; aperturâ subquadratâ, labro tenui, infrà producto, canali inconspicuo.*

THE CHINESE CERITHIDEA. Shell smooth, thin, pyramidal, elongate, subglaucous, spirally girt with a white band above at the suture, and with two red lines above and beneath; whorls longitudinally ribbed, suture with a single ridge, last whorl slightly angular beneath, and with a single obscure keel at the angle, ribs slightly arched, smooth; aperture rather square, outer lip thin, produced beneath, canal inconspicuous.

PHILIPPI, Abbildungen, t. 1.

Hab. China.

A narrower shell than *C. corneum*, more neatly banded, and of a less horny structure.

Species 18. (Mus. Cuming.)

CERITHIDEA MORCHII. *Cer. testâ subpyramidali, tenui, subcæruleâ, rubro spiraliter tæniatâ, sulcatâ, longitudinaliter costatâ, costis crassis, subarcuatis, nodiferis, interstitiis subplanulatis; anfractibus brevibus, subrotundis, ad marginem crenulatis; aperturâ parvâ, intus fuscâ, labro tenui paulo expanso, sinuato.*

MÖRCH'S CERITHIDEA. Shell subpyramidal, thin, bluish, spirally ribboned with red, grooved, longitudinally ribbed, ribs thick, slightly arched, nodiferous, interstices rather flat; whorls short, rather round, crenulated at the margin; aperture small, brown within, outer lip thin, a little expanded, sinuous.

A. ADAMS.

Hab. Island of Mindanao, Philippines.

A narrow shell, with shorter and more rounded whorls than *C. rhizoporarum*, and having fewer nodules on the ribs.

Species 19. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIDEA VARICOSA. *Cer. testâ solidâ, pyramidatâ, fuscâ, albo tæniatâ, liris spiralibus moniliferis, subdistantibus, et costis subarcuatis, validis, cancellatâ; an-*

fractibus subrotundis, ultimo infrà angulato, striato, subcarinato, varicibus crassis, nodiferis; aperturâ subquadratâ, columellâ retiusculâ, canali inconspicuo, labro crasso, subreflexo, sinuato.

THE VARICOSE CERITHIDEA. Shell solid, pyramidal, brown, white-banded, cancellated by spiral, beaded, rather distant ridges and slightly arched ribs; whorls rather rounded, the last angular, striated, and subcarinated beneath, varices thick, nodose; aperture rather square, columella rather straight, canal obscure, outer lip thick, somewhat reflected, sinuous.

SOWERBY, Genera of Shells.

C. Hegwischii, C. B. Adams.

C. Helicoide, C. B. Adams.

C. validum, C. B. Adams.

Hab. Real Llejos, Central America, at roots of mangroves; H. Cuming. Jamaica; C. B. Adams.

The above do not appear to be sufficiently distinct from the well-known form to be regarded otherwise than as varieties.

Species 20. (Mus. Cuming.)

CERITHIDEA IOSTOMA. *Cer. testâ solidâ, brevi, pyramidali, fuscâ, longitudinaliter costatâ, spiraliter liratâ, costis subnodosis; anfractibus subrotundis, ultimo infrà angulato, striato; aperturâ subquadratâ, labro crasso, anticè subproducto.*

THE PURPLE-MOUTHED CERITHIDEA. Shell solid, short, pyramidal, brown, longitudinally ribbed, spirally ridged, ribs subnodose; whorls rather round, the last angulated beneath and striated; aperture rather square, outer lip thick, rather produced in front.

PFEIFFER.

Hab. Cuba.

Much shorter than *C. varicosa*, with the ribs less distinctly nodose, so that it has much less of a cancellated and beaded appearance.

Species 21.

CERITHIDEA CORNEA. *Cer. testâ tenui, corneâ, obscurè fuscâ, spiraliter tenuistriatâ, longitudinaliter subdistanter costatâ, costis lævigatis, subobliquis; anfractibus rectiusculis, suturâ excavatâ, ultimo angulato, infra angulum striato, labro tenui expanso.*

THE HORNY CERITHIDEA. Shell thin, horny, obscurely brown, spirally finely striated, longitudinally rather distantly ribbed, ribs smooth, rather oblique; whorls rather straight, suture excavated, the last angular, striated below the angle, outer lip thin, expanded.

A. ADAMS, Sowerby's Thesaurus, Cerithium, sp. 168. f. 275.

Hab. Borneo, mouths of rivers.

22.a.

23.

24.

22.b.

25.a.

25.b.

26.

27.

28.

29.

Sowerby, del et lith.

Vincent Brooks, Imp.

CERITHIDEA.

PLATE IV.

Species 22. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIDEA ORNATA. *Cer. testâ turritâ, tenui, lævigatâ, fuscâ, albo et rubro fasciatâ, spiraliter obscurè sulcatâ, longitudinaliter costatâ, costis subnodosis, subarcuatis; anfractibus rotundis, ultimo infrà subcarinato, striato; aperturâ subrotundâ, labro expanso, extus incrassato.*

THE ORNAMENTED CERITHIDEA. Shell turreted, thin, smooth, brown, banded with white and red, spirally obscurely grooved, longitudinally ribbed, ribs rather nodose, rather arched; whorls round, the last slightly keeled beneath, striated; aperture rounded, outer lip expanded, thickened without.

A. ADAMS, Sowerby's Thesaurus, Cerithium, sp. 167, f. 277, 278.

Hab. Isle of Negroes, Philippines; H. Cuming.

Species 23.

CERITHIDEA SALMACIDA. *Cer. testâ angustâ, tenui, turritâ, fuscâ, longitudinaliter tenuicostatâ, costis numerosis, sinuatis; anfractibus rotundis, ultimo infrà bicarinato; aperturâ productâ, labro sinuato, subexpanso, tenui.*

THE SALT-MARSH CERITHIDEA. Shell narrow, thin, turreted, brown, longitudinally thin-ribbed, ribs numerous, sinuous; whorls rounded, the last bicarinated beneath; aperture produced, outer lip sinuated, slightly expanded, thin.

MORELET.

Hab. —— ?

More cylindrical in form than *C. costata*, with more numerous whorls and closer ribs.

Species 24. (Mus. Cuming.)

CERITHIDEA BOMBAYANA. *Cer. testâ parvâ, brevi, lævigatâ, tenui, fuscâ, prope suturam albâ; anfractibus rotundis, obscurè costatis, ad suturam moniliferis, ultimo infrà tricarinato; aperturâ subtrigonâ, labro infrà producto.*

THE BOMBAY CERITHIDEA. Shell small, short, smooth, thin, brown, white near the suture; whorls round, obscurely ribbed, beaded at the suture, the last three-keeled below; aperture subtrigonal, outer lip produced.

SOWERBY.

Hab. Bombay.

A pretty little shell, with a row of bead-like, white nodules on the sutural margin of the whorls.

Species 25. (Fig. *a*, *b*, Mus. Cuming.)

CERITHIDEA MAMILLATA. *Cer. testâ pyramidali, glaucâ, fusco fasciatâ, solidâ, longitudinaliter costatâ, spiraliter sulcatâ, costis quadrituberculatis, tuberculis rotundis, ultimo anfractu infrà tricarinato; aperturâ intus fuscâ, columellâ obscurè uniplicatâ, canali lato, labro sinuato.*

THE MAMILLATED CERITHIDEA. Shell pyramidal, glaucous, banded with brown, solid, longitudinally ribbed, spirally grooved, ribs with four tubercles, tubercles rounded, the last whorl tricarinated beneath; aperture brown within, columella obscurely single-plaited, canal broad, outer lip sinuated.

RISSO, Enum. Moll. Sicil. i. p. 194.

Hab. Sicily.

Species 26. (Mus. Cuming.)

CERITHIDEA MONTAGNEI. *Cer. testâ pyramidali, ventricosâ, lævigatâ, longitudinaliter costatâ, fuscâ, albo et fusco-nigrescente fasciatâ, costis lævibus, arcuatis; anfractibus rotundis, ultimo infrà carinato, infra carinam striato; aperturâ magnâ, rotundâ, columellâ subplanulatâ, canali angusto, labro latè expanso, anticè producto.*

MONTAGNE'S CERITHIDEA. Shell pyramidal, ventricose, smooth, longitudinally ribbed, brown, banded with white and blackish-brown, ribs smooth, arched; whorls round, the last carinated beneath, and striated under the keel; aperture large, round, columella rather flat, canal narrow, outer lip widely expanded, produced in front.

D'ORBIGNY, Voy. dans Amér. Mér. Moll.

C. Reevianum, C. B. Adams.

C. Largillierti, Philippi.

Species 27. (Mus. Cuming.)

CERITHIDEA BICARINATA. *Cer. testâ pyramidali, fusco-nigricante, ad suturam albo-lineatâ, longitudinaliter costatâ, infrà spiraliter acutè bicarinatâ; aperturâ subquadratâ, canali subproducto.*

THE BICARINATED CERITHIDEA. Shell pyramidal, brownish-black, with a white line at the suture, longitudinally ribbed, spirally sharply two-keeled beneath; aperture rather square, canal slightly produced.

GRAY, Fauna of New Zealand.

Cerithium lutulentum, Kiener.

Hab. New Zealand.

Species 28.

CERITHIDEA SUBCARINATA. *Cer. testâ parvâ, lævi, fusco-nigricante, longitudinaliter costatâ, infrà spiraliter tricarinatâ; aperturâ parvâ, subrotundâ, labro paulo producto, canali brevi, profundo.*

THE SUBCARINATED CERITHIDEA. Shell small, smooth, blackish-brown, longitudinally ribbed, spirally tricarinate beneath; aperture small, rather round, outer lip a little produced, canal short, deep.

SOWERBY.

Hab. New Zealand.

A curious little brown shell, showing three rather obscure ribs at the lower part of the last whorl.

Species 29. (Mus. Cuming.)

CERITHIDEA PULCHRA. *Cer. testâ pyramidali, solidâ, ventricosâ, spiraliter liratâ, longitudinaliter costatâ, fuscâ, albo et fusco-nigricante fasciatâ, costis nodosis, arcuatis; anfractibus rotundis, ultimo infrà carinato, infra carinam striato; aperturâ magnâ, rotundâ, columellâ subplanulatâ, canali angusto, labro latè expanso, nigro.*

THE BEAUTIFUL CERITHIDEA. Shell pyramidal, solid, ventricose, spirally ridged, longitudinally ribbed, brown, banded with white and blackish-brown, ribs nodose, curved; whorls round, the last keeled below, striated under the keel; aperture large, round, columella rather flat, canal narrow, outer lip widely expanded, black.

C. B. ADAMS.

Hab. Panama.

More solid than *C. Montagnei*, the whorls crossed by striæ, and the ribs consequently nodose. The outer lip is black.

CERITHIDEA.

	Plate.	Species.
albo-nodosa	I.	1
ambigua	II.	9
bicarinata	IV.	27
Bombayana	IV.	24
costata	II.	10
Charbonnieri	II.	12
cornea	III.	21
decollata	II.	14
Fortunei	III.	15
Hanleyana	III.	16
iostoma	III.	20
Kieneri	I.	6
Lafondii	I.	2
Montagnei	IV.	26
Mazatlanica	I.	8
mamillata	IV.	25
Morchii	II.	18
obtusa	I.	4
ornata	IV.	22
pulchra	IV.	29
quadrata	I.	5
Rhizoporarum	II.	13
Rissoidea	II.	11
Sinensis	III.	17
sacrata	I.	7
salmacida	IV.	23
subcarinata	IV.	28
tenuis	I.	3
unicarinatum	II.	12
varicosa	III.	19

MONOGRAPH

OF THE GENUS

PYRAZUS.

"In Nature there's no blemish."

Shakspeare.

1a.

1 b.

1 c.

2 a.

3.

2 b.

4.

Sowerby, del. et lith.

Vincent Brooks, Imp.

PYRAZUS.

Genus PYRAZUS, *Montfort.*

Testa subfluviatilis, claviformis, ventricosa, subpyramidalis, epidermide tenui induta, varicibus paucis; aperturâ pyriformi, suprà et infrà canaliculatâ, labro expanso, supernè elevato, infrà ante canalem terminalem producto; operculo corneo, rotundo, multispirali.

Shell subfluviatile, club-shaped, ventricose, subpyramidal, covered with a thin epidermis, varices few; aperture pyriform, with a canal above and beneath, outer lip expanded, elevated above, produced in front of the terminal canal beneath; operculum horny, rounded, multispiral.

To the three species already known, from the Eastern Archipelago and Australia, a very interesting one has recently been added from New Caledonia.

Species 1. (Fig. *a*, *b*, *c*, Mus. Cuming.)

PYRAZUS SULCATUS. *Pyr. testâ ventricosâ, glaucâ, fusco fasciatâ, longitudinaliter validè plicatâ, spiraliter inciso-sulcatâ; anfractibus subrotundis, medianis inflatis, suturâ excavatâ; aperturâ pyriformi, suprà canaliferâ, anticè in canalem rotundum terminante, columellâ incrassatâ, obscurè biplicatâ, labro expanso, elevato, infrà rotundatim ante canalem producto.*

THE SULCATED PYRAZUS. Shell ventricose, glaucous, banded with brown, longitudinally strongly plaited, spirally gilt with incised grooves; whorls rather round, the central ones inflated, suture hollow; aperture pyriform, with a canal above, terminating in a rounded canal beneath, columella thick, obscurely biplicated, outer lip expanded, elevated beneath, produced in a rounded form in front of the canal.

BORN (*Murex sulcatus*), Mus. p. 320.

Murex mollaccanus, Gmel.

Strombus Mangiorum, Schroet.

Hab. China and Philippines.

In many full-grown specimens of this shell the outer lip is bent round, so as to form a junction with the inner, thus crossing and partially enclosing the canal.

Species 2. (Mus. Cuming.)

PYRAZUS PALUSTRIS. *Pyr. testâ magnâ, pyramidali, fuscâ; anfractibus rectis, longitudinaliter plicatis, spiraliter distanter sulcatis, interstitiis planis; aperturâ subquadratâ, canali brevi, labro intra ante canalem producto, operculo anfractibus laqueatis.*

THE MARSHY PYRAZUS. Shell large, pyramidal, brown, whorls straight, longitudinally plaited, spirally distantly sulcated, interstices flat; aperture subquadrate, canal short, outer lip produced in front of the canal below, operculum with the whorls fluted.

LINNÆUS, Syst. Nat.

Cerithium crassum, Lamarck.

Hab. East Indies, Australia, mouths of rivers.

Species 3.

PYRAZUS GOURMYI. *Pyr. testâ curtâ, ventricosâ, solidâ, albâ, flammulis fuscis variegatâ, epidermide subviridi indutâ, spiraliter striatâ; anfractibus paucis, ultimo magno, suturâ distinctâ; aperturâ rotundâ, canali tubiformi, labro expanso, infrà ante canalem validè producto, labio interno arcuato, suprà calloso et canalifero.*

GOURMY'S PYRAZUS. Shell short, ventricose, solid, white, variegated with brown flame-like markings, covered with a greenish epidermis, spirally striated; whorls few, the last large, suture distinct; aperture rounded, canal tubular, outer lip expanded, much produced below in front of the canal, inner lip arched, with a callosity and a canal above.

CROSSE, Journ. de Conchyliologie, 3rd series, t. 1. n. 2.

Hab. New Caledonia.

Species 4.

PYRAZUS SEMITRISULCATUS. *Pyr. testâ ventricosâ, solidâ, glaucâ, fusco fasciatâ, obscurè sulcatâ, suprà longitudinaliter plicatâ; anfractibus ultimis planulatis, suturâ excavatâ; aperturâ subpyriformi, labro validè expanso, infrà rotundatâ, ante canalem producto, canali brevi, tubiformi, columellâ obscurè biplicatâ.*

THE HALF-SULCATED PYRAZUS. Shell ventricose, solid, glaucous, banded with brown, obscurely grooved, longitudinally plaited above; the last whorls smooth, suture excavated; aperture subpyriform, outer lip strongly expanded, rounded beneath and produced in front of the canal, canal short, tubular, columella obscurely two-plaited.

BOLTON, Cat. Conch. Coll. Yoldi, p. 57.

Hab. Port Essington.

The lower whorls of this shell are smooth, and in no part are the plaits and grooves so strong and deep as in *P. sulcatus.*

MONOGRAPH

OF THE GENUS

LAMPANIA.

"Nor slack to greet my Maker on the height,
By wood, or living stream."

Bishop Mant.

1.

2.a.

2.b.

3.a.

4.a.

4.b.

3.b.

5.a.

5.b.

5.c.

Sowerby, del. et lith.

Vincent Brooks, Imp.

LAMPANIA.

PLATE I.

Genus LAMPANIA, *Gray*.

Testa subfluviatilis, clavata; anfractibus brevibus, turritis, dorso plerumque subarcuato; aperturâ infrà subproductâ, canali vix distincto; operculo corneo, multispirali.

Shell subfluviatile, club-shaped; whorls short, turreted, back generally somewhat arched; aperture rather produced beneath, canal scarcely distinct; operculum horny, multispiral.

There really are no characters by which this group can be defined, so as to distinguish all the species that belong to it from all others. When placed in a drawer, these species appear to belong to each other rather than to other groups, but for what reason can scarcely be explained, except it be that in the typical species the back is somewhat arched, and the aperture is bent forward in front, so as in some measure to obliterate the canal, and that in these characters most of the species more or less agree. The greater part are Australian shells, with one from China, and one or two from the Philippines.

Species 1.

LAMPANIA ANGULIFERA. *Lam. testâ brevi, pyramidali, infrà angulatâ, nigrescente, longitudinaliter plicatâ; anfractibus octo, rectis, spiraliter tricostatis, costis ad plicas tuberculiferis, ultimo medio angulato, infra angulum nodoso-costato; aperturâ subtrigonâ, labro angulato.*

THE ANGULAR LAMPANIA. Shell short, pyramidal, angular beneath, blackish, longitudinally plaited; whorls eight, straight, spirally three-grooved, ribs tuberculiferous on the plaits, the last angular in the middle, nodosely ribbed beneath the angles; aperture subtrigonal, outer lip angular.

SOWERBY.

Hab. Australia.

A curiously angular shell, which seems to agree in generic character better with this than with other groups.

Species 2. (Fig. *a*, *b*, Mus. Cuming.)

LAMPANIA CUMINGII. *Lam. testâ brevi, nigro tessellatâ, dorso arcuato; anfractibus paucis, medio et infrà subinflatis, spiraliter sulcatis; aperturâ subexpansâ, labro paulò elevato.*

CUMING'S LAMPANIA. Shell short, tessellated with black, back arched; whorls few, rather inflated at and below the middle, spirally sulcated; aperture somewhat expanded, outer lip a little elevated.

CROSSE, Journ. Conch.

Cerithium Steenstrüpii, Troschel.

Hab. River Pehio.

Resembling *L. zonalis*, but much shorter.

Species 3. (Fig. *a*, *b*, Mus. Cuming.)

LAMPANIA ATRAMENTARIUM. *Lam. testâ subpyramidali, nigrâ vel nigro-punctatâ, spiraliter sulcatâ; anfractibus medio et infrà inflatis, ad suturam albis, columellâ albâ, arcuatâ, brevi, labro rotundo.*

THE INK-BOTTLE LAMPANIA. Shell subpyramidal, black or black-spotted, spirally sulcated; whorls inflated in and beneath the centre, white at the suture, columella white, arched, short, outer lip rounded.

A. ADAMS, Sowerby's Thes. Conch. sp. 144. f. 249, 250.

Hab. ——?

Distinguished from the other species by the inflation of the lower part of the whorls.

Species 4. (Fig. *a*, *b*, Mus. Cuming.)

LAMPANIA AUSTRALIS. *Lam. testâ subventricosâ, nigrescente, albo-fasciatâ, longitudinaliter plicatâ, spiraliter costellis moniliferis cinctâ; anfractibus subrotundis, margine crenatis; aperturâ obliquè subquadratâ, labro medio producto, ad columellam vix emarginato.*

THE AUSTRALIAN LAMPANIA. Shell rather ventricose, blackish, white-banded, longitudinally plaited, spirally girt with beaded ribs; whorls somewhat rounded, crenated at the margin; aperture obliquely subquadrate, outer produced in the centre, scarcely emarginated at the columella.

QUOY et GAIMARD, Voy. Astrolabe.

Hab. Australia.

It may be doubted whether this species is rightly separated from *L. zonalis*, because, although it is very much rougher in sculpture, that character is one of degree, and in some specimens it is intermediate.

Species 5. (Fig. *a*, *b*, *c*, Mus. Cuming.)

LAMPANIA ZONALIS. *Lam. testâ subpyramidali, sublævigatâ, fusco et nigro tæniatâ, longitudinaliter plicatâ; anfractibus supra medium angulatis, ad angulum subnodosis, infrà sulcatis; labro sinuoso, infra medium producto ad terminum vix emarginato.*

THE BANDED LAMPANIA. Shell subpyramidal, rather smooth, banded with brown and black, longitudinally plaited; whorls angular above the middle, subnodose at the angle, sulcated beneath; outer lip sinuous, produced below the middle, scarcely emarginate at the end.

BRUGUIÈRE, Dict. no. 30.

Trochus striatellus, Dilwyn.

Cerium pirenale, Quoy.

Hab. Australia.

Very variable, some of the specimens approaching very nearly to *L. australis*.

6. a.

6. b.

6. c.

7. a.

8. a.

8. b.

7. b.

9. a.

9. b.

10.

LAMPANIA.

PLATE II.

Species 6. (Fig. *a*, *b*, Mus. Cuming.)

LAMPANIA SEPTEM-STRIATUM. *Lam. testâ parvâ, obtusâ, nigrâ, seu cinereâ, seu albo-fasciatâ, spiraliter lineis elevatis liratâ, longitudinaliter plicatâ; aperturâ parvâ, subtrigonâ, labro intus crenato, columellâ brevi, canali parvo.*

THE SEVEN-STRIATED LAMPANIA. Shell small, obtuse, black, or ash-coloured, or white-banded, ridged with elevated spiral lines, longitudinally plicated; aperture small, rather triangular, outer lip crenated within, columella short, canal small.

SAY, Amer. Conch. pl. 49. f. 2. (Cerithium).
Cerithium peloritanum, Cantraine.
Cerithium nigrescens, Menke.
Cerithium nigrinum, Philippi.
Cerithium albo-vittatum, C. B. Adams.

Hab. North America.

A small, very variable shell, which, having no definite characters, has been placed in various genera of *Cerithiadæ*, but which, on the whole, appears best placed in *Lampania*.

Species 7. (Fig. *a*, *b*, Mus. Cuming.)

LAMPANIA INCISA. *Lam. testâ oblongâ, turritâ, spiraliter inciso-sulcatâ, glaucâ, nigro-maculatâ; anfractibus subventricosis, gradatim crescentibus, prope suturam angulatim subelevatis; aperturâ magnâ, labio interno posticè uniplicato, anticè in canalem distinctum terminanti, labro laqueato.*

THE INCISED LAMPANIA. Shell oblong, turreted, spirally girt with incised grooves, glaucous, spotted with black; whorls subventricose; aperture large, inner lip single-plaited behind, terminating in a distinct canal, outer lip fluted.

SOWERBY, Thes. Conch. Cerithium, sp. 83. f. 152.

Hab. Australia and the Philippines.

This pretty species is scarcely characteristic of the genus, having a distinct canal.

Species 8. (Fig. *a*, *b*, Mus. Cuming.)

LAMPANIA CURTA. *Lam. testâ brevi, subventricosâ, spiraliter inciso-sulcatâ, glaucâ, nigro-maculatâ; anfractibus subventricosis, gradatim crescentibus, prope suturam subangulatis; aperturâ magnâ, anticè in canalem distinctum terminante, labio interno posticè uniplicato, labro laqueato.*

THE SHORT LAMPANIA. Shell short, subventricose, spirally girt with incised grooves, glaucous, spotted with black; whorls subventricose, gradually increasing, slightly angular; aperture large, terminating in a distinct canal in front, inner lip single-plaited at the back, outer lip fluted.

SOWERBY, Thes. Conch. Cerithium, sp. 84. f. 153, 154.

Hab. ——?

Much shorter than *L. incisa*.

Species 9. (Fig. *a*, *b*.)

LAMPANIA SCULPTUM. *Lam. testâ parvâ, brevi, ventricosâ, spiraliter sulcatâ, inter sulcis graniferâ, pallidâ, fusco-nigrescente variegatâ; anfractibus rotundis, ultimo magno; aperturâ semirotundâ, ad terminum canaliferâ, labro intus crenulato.*

THE SCULPTURED LAMPANIA. Shell small, short, ventricose, spirally grooved, granulated between the grooves, pale, variegated with blackish-brown; whorls round, the last large; aperture half-round, with a canal at the end, outer lip crenulated within.

SOWERBY, Thes. Conch. Cerithium, sp. 80. f. 144, 145.

Hab. ——?

A rather darkly-marked, small, short shell, evidently belonging to the same section with *L. incisa* and *L. curta*.

Species 10. (Mus. Cuming.)

LAMPANIA GALLAPAGINIS. *Lam. testâ brevi, solidâ, nigrâ, sulcis spiralibus et costis longitudinalibus moniliferis minutè granulatâ; anfractibus octo, gradatim crescentibus; aperturâ subovali, canali brevissimo.*

THE GALLAPAGOS LAMPANIA. Shell short, solid, black, minutely granulated by spiral grooves and longitudinal beaded ribs; whorls eight, gradually enlarging; aperture rather oval, canal very short.

A. ADAMS, Sowerby's Thesaurus, Cerithium, sp. 85. f. 155, 156.

Hab. Gallapagos.

LAMPANIA.

	Plate.	Species.		Plate.	Species.
angulifera	I.	1	incisa	II.	7
atramentarium	I.	3	pirenale	I.	5
australis	I.	4	septem-striatum	II.	6
Cumingii	I.	2	sculptum	II.	9
curta	II.	8	striatellus	I.	5
Gallapaginis	II.	10	zonalis	I.	5

MONOGRAPH

OF THE GENUS

TYMPANOTONOS.

"As is the ooze and bottom of the sea with sunken wrack, and sumless treasuries."

Shakspeare.

1.

2a.

2b.

3.

4.

6.

5.

Sowerby, del. et lith.

Vincent Brooks, Imp.

TYMPANOTONOS.

PLATE I.

Genus TYMPANOTONOS, Lamarck.

Testa fluviatilis, turrita, irregulariter varicosa, longitudinaliter plicata, transversè sulcata, plerumque nodifera; aperturâ subquadratâ, columellâ brevi, tortuâ, canali brevi, emarginato, labro anticè producto, sinuato; operculo corneo, multispirali.

Shell fluviatile, turreted, irregularly varicose, longitudinally plaited, transversely sulcated, generally nodiferous; aperture somewhat square, columella short, tortuous, canal short, emarginate, outer lip produced in front, sinuous; operculum horny, multispiral.

Our descriptions of the family of *Cerithiadæ* having been commenced with a separation of the genera *Vertagus* and *Cerithium*, it has become necessary, if only for the sake of consistency, to follow out the plan of similar divisions among the more fluviatile species. The aperture is peculiarly formed in the shells of this genus, the outer lip being much expanded above and below, and brought round prominently in front of the canal. The shells are found in marshy places, generally near the mouths of rivers, where the water is brackish; the older forms in West Africa and India, and the comparatively recent ones in the Philippines, collected by the late Mr. Cuming.

Species 1. (Mus. Cuming.)

TYMPANOTONOS RETIFERA. *Tym. testâ pyramidali, univaricosâ, curtâ, solidâ, fasciatâ, plicis longitudinalibus et sulcis spiralibus, nodoso-reticulatâ; anfractibus curtis, suprà prope suturam albis tumidis; aperturâ intus fuscâ, labro supernè et infrà expanso.*

THE NETTED TYMPANOTONOS. Shell pyramidal, with a single varix, short, solid, banded, nodosely reticulated, with longitudinal plaits and spiral grooves; whorls short, white, and tumid above near the suture; aperture brown within, outer lip expanded above and below.

A. ADAMS, Sowerby's Thesaurus, Cerithium, sp. 184.

Hab. Island of Siquijor, Philippines, in salt marshes; H. Cuming.

Differing from *T. fluviatile* principally in the suture not being grooved, and in the reticulated sculpture.

Species 2. (Fig. *a*, *b*, Mus. Cuming.)

TYMPANOTONOS LAYARDI. *Tym. testâ breviusculâ, turritâ, cæruleâ; anfractibus rectis, gradatis, unifasciatis, triseriatim noduliferis, nodulis æqualibus, rotundis; aperturâ subquadratâ, intus fuscâ, labro vix expanso, canali parvo.*

LAYARD'S TYMPANOTONOS. Shell rather short, turreted, bluish; whorls straight, gradated, single-banded, with three series of nodules, nodules equal, rounded; aperture rather square, brown within, the outer lip slightly expanded.

A. ADAMS, Sowerby's Thesaurus, Cerithium, sp. 151. f. 257.

Hab. Ceylon; A. L. Layard.

The straight, gradated whorls, and the rounded nodules of the surface in this shell distinguish it sufficiently from the other species.

Species 3. (Mus. Cuming.)

TYMPANOTONOS FUSCATUS. *Tym. testâ pyramidali, solidâ, medio anfractuum tuberculatâ, tuberculis magnis, extantibus, acutis; anfractibus suprà et infrà ad suturam moniliferâ, ultimo bicarinato, infrà spiraliter striato, labro expanso, anticè validè producto, epidermide crasso, fusco.*

THE BROWN TYMPANOTONOS. Shell pyramidal, solid, tuberculated in the middle of the whorls, tubercles large, standing out, sharp; whorls beaded above and below at the suture, the last bicarinated, spirally striated beneath, outer lip expanded, much produced in front, epidermis thick, brown.

LINNÆUS, Systema Naturæ (*Murex*).

Cerithium muricatum, Bruguière.

Hab. West Africa, in mouths of rivers.

This well-known aculeated shell, as well as the following two species, approach nearly in character to some of the *Melaniadæ*. These last however, have an oval, paucispiral operculum, while the opercula of *Tympanotonos* is, like other freshwater *Cerithiadæ*, multispiral.

Species 4. (Mus. Cuming.)

TYMPANOTONOS RADULA. *Tym. testâ elongato-pyramidali, irregulariter varicosâ; anfractibus numerosis, curtis, supernè ad suturam moniliferis, tum canaliferis, infra canalem angulatis, et granoso-costatis, ultimo infrà angulato, canali magno circulari, labro anticè validè producto.*

THE ROOT TYMPANOTONOS. Shell lengthened, pyramidal, irregularly varicose; whorls numerous, short, beaded above at the sutures, then having a canal, with an angle next under the canal, and granulated ribs, the last angulated beneath, canal large, circular, outer lip much produced in front.

LINNÆUS, Systema Naturæ (*Murex*).

Hab. West Africa, mouths of rivers.

Resembling the last species, but without the spire-like prominences.

Species 5. (Mus. Cuming.)

TYMPANOTONOS OWENII. *Tym. testâ pyramidali; anfractibus numerosis, curtis, angulatis, supernè ad suturam moniliferis et canaliferis, supra medium angulatis, ad angulum acutè tuberculatis, infra angulum costatis, costis tuberculatis, tuberculis numerosis, moniliformibus; aperturâ parvâ, labro anticè subexpanso, canali parvo.*

OWEN'S TYMPANOTONOS. Shell pyramidal; whorls numerous, short, angular, above at the suture beaded and with a canal, angulated above the middle, with sharp tubercles on the angles, under the angle ribbed, ribs tuberculated, tubercles numerous, bead-like; aperture small, outer lip slightly expanded in front, canal small.

FÉRUSSAC.

Hab. West Africa.

The sculpture in this species is much more coarse than in *T. radula*, the aperture is smaller, the lip less expanded, and produced in front. This species is, however, rather doubtful.

Species 6. (Mus. Cuming.)

TYMPANOTONOS MULTIGRANOSUS. *Tym. testâ elongato-subcylindraceâ; anfractibus supernè subangulatis, costis quatuor parvis moniliferis cinctis; aperturâ subquadratâ, labro vix expanso.*

THE MANY-GRAINED TYMPANOTONOS. Shell elongated, subcylindrical; whorls above slightly angulated, girt with four small beaded ribs, aperture rather square, outer lip very little produced.

SOWERBY, Thes. Conch. Cerithium, sp. 182, f. 302.

Hab. West Africa.

The beaded ribs are much smaller, in proportion to the spaces betweeen them, than in the two preceding species.

7.a.

8.a.

8.b.

7.b.

9.a.

9.b.

10.

Sowerby del. et lith.

Vincent Brooks, Imp.

TYMPANOTONOS.

PLATE II.

Species 7. (Fig. *a*, *b*, Mus. Cuming.)

TYMPANOTONOS MICROPTERA. *Tym. testâ pyramidali, longitudinaliter plicatâ, glaucâ, fusco-tæniatâ; anfractibus trisulcatis, interstitiis planatis, suturâ excavatâ; aperturâ parvâ, labro validè expanso, suprà angulatim elevato, infrà in angulum acuminatum producto.*

THE LITTLE-WINGED TYMPANOTONOS. Shell pyramidal, longitudinally plaited, glaucous, banded with brown; whorls with three sulci, the interstices flat, suture excavated; aperture small, outer lip much expanded, with an angular elevation above, and produced into an acuminated angle below.

KIENER (Cerithium), Icon. Conch.
Cerithium fluviatile, var. nonnull.

Hab. Philippines.

This species, as well as the following, is figured in Sowerby's monograph as a variety of *Cerithium fluviatile*. The greater expansion of the outer lip constitutes its claim to distinction.

Species 8. (Fig. *a*, *b*, Mus. Cuming.)

TYMPANOTONOS EURYPTERA. *Tym. testâ pupæformi, ad apicem attenuatâ, ad medium subinflatâ, fusco-tæniatâ; anfractibus trisulcatis, longitudinaliter plicatis, suturâ excavatâ; aperturâ dolabriformi, labro validè expanso, supernè in angulum elevato, infrà validè producto.*

THE BROAD-WINGED TYMPANOTONOS. Shell pupæform, attenuated at the apex, rather swelled in the middle, banded with brown; whorls with three grooves, plaited longitudinally, suture excavated; aperture hatchet-shaped, outer lip much expanded, elevated into an angle above, much produced beneath.

A. ADAMS.

Hab. Island of Negros, Philippines.

Distinguished from the preceding by the form, being a narrower shell, with the centre whorls swelled.

Species 9. (Fig. *a*, *b*, Mus. Cuming.)

TYMPANOTONOS FLUVIATILIS. *Tym. testâ breviusculâ, pyramidali, glaucâ, fusco-tæniatâ, longitudinaliter plicatâ; anfractibus trisulcatis, rectis, suturâ excavatâ, labro paulo expanso, suprà elevato, infrà producto.*

THE FLUVIATILE TYMPANOTONOS. Shell rather short, pyramidal, glaucous, banded with brown, longitudinally plaited, whorls straight, with three grooves, suture excavated, outer lip a little expanded, elevated above, produced beneath.

POTIEZ et MICHAUD, Cat. des Moll. de Douai, p. 363.
Strombus pictus, Bolton.

Hab. India.

Species 10. (Mus. Cuming.)

TYMPANOTONOS ALATUS. *Tym. testâ subcylindricâ, elongatâ, longitudinaliter plicatâ, glaucâ, fusco obscurè tæniatâ; anfractibus rectiusculis, trisulcatis, suturâ excavatâ; aperturâ subrotundâ, labro expanso, laqueato, suprà elevato, infra paulo producto.*

THE WINGED TYMPANOTONOS. Shell subcylindrical, long, longitudinally plaited, glaucous, obscurely banded with brown; whorls rather straight, three-grooved, suture excavated; aperture rather rounded, outer lip expanded, fluted, elevated above, slightly produced beneath.

PHILIPPI.

Hab. West Africa.

The central whorls of this shell are a little more swelled than in *T. fluviatile*, the mouth is more rounded, and the outer lip less angularly produced where it bends over the canal.

TYMPANOTONOS.

	Plate.	Species.		Plate.	Species.
alatus	II.	10	multigranosus	I.	6
euryptera	II.	8	microptera	II.	7
fuscatus	I.	3	Owenii	I.	5
fluviatilis	II.	9	retiferus	I.	1
Layardi	I.	2	radula	I.	4

MONOGRAPH

OF THE GENUS

LEIOSTRACA.

"Thou, who hast given me eyes to see
And love this sight so fair,
Give me a heart to find out Thee,
And read thee everywhere."

Keble.

1a.

1b.

1c.

2.

3.

4.

5a.

6a.

6b.

5b.

LEIOSTRACA.

PLATE I.

Genus LEIOSTRACA, *H. and A. Adams.*

Testa elongata, multispiralis, polita, varicibus nullis, apice acuto, recto; aperturâ supernè acuminatâ, infrà rotundatâ, labio interno reflexo, plerumque subcomplanato, axi imperforato, labro subincrassato; operculo corneo, ovato, subspirale.

Shell elongate, multispiral, polished, without varices, apex sharp, straight; aperture acuminate above, rounded below, inner lip reflected, generally rather flat, axis imperforate, outer lip slightly thickened; operculum horny, ovate, subspiral.

The more typical species of *Leiostraca* are distinguished by a slight flatness in front of the body-whorl, which, however, is not very easy to detect in the majority. The absence of varices is a more constant though negative character, and this, with the straight apex and more elongate form, will render the genus sufficiently distinct from *Eulima*, to satisfy those who are interested in the more recondite among generic divisions.

Twenty-two species are enumerated in our Plates, of which about half were given in Mr. Arthur Adams's monograph in Sowerby's 'Thesaurus;' many of the others have been described by that gentleman subsequently, and three are here described for the first time.

Jamaica, Central America, Australia, and the Philippines, have furnished species of *Leiostraca*, and six of the new species are among the numerous Japanese discoveries of Mr. A. Adams.

Species 1. (Fig. *a*, *b*, Mus. Cuming.)

LEIOSTRACA VARIANS. *Lei. testâ elongatâ, angustâ, tenui, pallidè fulvâ, latè fusco fasciatâ, seu variè fulvo et albo tæniatâ; aperturâ oblongâ, supernè angustâ; anfractibus oblongis, rectiusculis.*

THE VARYING LEIOSTRACA. Shell elongate, narrow, thin, pale-fawn, with broad brown band, or variously ribanded with brown and white; aperture oblong, narrow above; whorls oblong, rather straight.

SOWERBY, Pro. Zool. Soc. 1834; Thes. Conch. pl. 170. f. 23, 24.

Hab. Xipixapi, Central America.

Species 2. (Mus. Cuming.)

LEIOSTRACA SUBULATA. *Lei. testâ angustâ, elongatâ, tenui, pallidè fulvâ, fusco rubescenti bifasciatâ; anfractibus elongatis, paulò ventricosis, ultimo subovali; aperturâ elongatâ.*

THE SUBULATE LEIOSTRACA. Shell narrow, elongate, thin, pale-fulvous, with two bands of reddish-brown; whorls long, a little ventricose, the last rather oval; aperture elongate.

MONTAGU.

Helix flavo-cincta, Megerle.

Melania Donovani, Forbes.

Eulima lineata, Sowerby.

Hab. British Islands.

The whorls are proportionately longer and a little more swelled in this species than in the preceding.

Species 3.

LEIOSTRACA RECTA. *Lei. testâ semipellucidâ, albâ, pallidissimè roseo tinctâ, pyramidali; anfractibus paucis, rectis, ultimo ovali, ventricoso; aperturâ latâ, pyriformi.*

THE STRAIGHT LEIOSTRACA. Shell semipellucid, white, tinged with very pale-rose, pyramidal; whorls few, straight, the last oval, ventricose; aperture wide, pyriform.

C. B. ADAMS, Shells of Panama.

Hab. Panama.

A thin, white shell, with a very slight tinge of rose.

Species 4. (Mus. Cuming.)

LEIOSTRACA UNILINEATA. *Lei. testâ curtâ, subovali, tenui, albâ, lineâ spirali pallidâ cinctâ; anfractibus paucis, subinflatis; aperturâ pyriformi, elongatâ.*

THE SINGLE-LINE LEIOSTRACA. Shell short, rather oval, thin, white, girt with a spiral line; whorls few, slightly inflated; aperture pyriform, elongated.

ADAMS and REEVE, Zool. Voy. Samarang, p. 52. pl. 11. f. 53.

Hab. Sooloo Sea.

Shorter and more oval than any of the preceding, the last whorl occupying more than half of the entire length of the shell.

Species 5. (Fig. *a*, *b*, Mus. Cuming.)

LEIOSTRACA METCALFEI. *Lei. testâ subfusiformi, compressâ, subpellucidâ, albâ, cingulâ rufâ interruptâ et lineis undulatis obliquiter longitudinalibus ornatâ; anfractibus perpaucis, ultimo magno, ovali; aperturâ subtrigonâ, infrà latâ.*

METCALFE'S LEIOSTRACA. Shell subfusiform, compressed, subpellucid, white, ornamented with an interrupted red band and undulating obliquely longitudinal lines; whorls very few, the last large, oval; aperture subtrigonal, wide beneath.

A. ADAMS, Sowerby's Thesaurus, Leiostraca, sp. 1. pl. 170, f. 12, 13.

Hab. ——?

This pretty little shell is very different in form from all the other species, and exhibits, in a strong degree, the peculiar compressed character of the body-whorl in front.

Species 6. (Fig. *a*, *b*, Mus. Cuming.)

LEIOSTRACA BIVITTATA. *Lei. testâ elongatâ, attenuatâ, pallidâ, fasciis linearibus, spiralibus duabus in medio anfractuum cinctâ; anfractibus rectis, moderatè oblongis; aperturâ angustâ, pyriformi.*

THE DOUBLE-BANDED LEIOSTRACA. Shell elongate, attenuate, pale, girt with two linear spiral bands in the middle of the whorls; whorls straight, moderately oblong; aperture narrow, pyriform.

H. and A. ADAMS, Genera of Recent Mollusca.

Eulima bilineata, Adams and Reeve.

Hab. ——?

It is difficult to distinguish this species from *Lei. varians*. The two thin bands in the centre of the whorls give it a different aspect, and it is narrower, with shorter whorls. The aperture is somewhat less spread at the lower part.

7.

8.a.

8.b.

9.a.

10.a.

10.b.

9.b.

11.a.

11.b.

12.

Sowerby, del. et lith.

Vincent Brooks, Imp.

LEIOSTRACA.

PLATE II.

Species 7. (Mus. Cuming.)

LEIOSTRACA ACUTA. *Lei. testâ elongatâ, subcylindricâ, sordidè albâ; anfractibus paucis, rectiusculis; aperturâ angustâ.*

THE SHARP LEIOSTRACA. Shell elongate, subcylindrical, dull-white; whorls few, rather straight; aperture narrow.

SOWERBY, Pro. Zool. Soc. 1834.

Although the name of *L. acuta* has been applied to this shell, its apex is by no means sharp as compared with many other shells of the genus.

Species 8. (Fig. *a*, *b*, Mus. Cuming.)

LEIOSTRACA FULVO-CINCTA. *Lei. testâ parvâ, subovali, albâ, fasciis linearibus duabus, interruptis, spiralibus, ad suturam et suprà cinctâ; anfractibus perpaucis, subventricosis; aperturâ breviusculâ.*

THE BROWN-BANDED LEIOSTRACA. Shell small, suboval, white, girt with two linear, interrupted, spiral bands at and above the suture; whorls very few, subventricose; aperture rather short.

C. B. ADAMS, Shells of Jamaica.

Hab. Jamaica.

Species 9. (Fig. *a*, *b*, Mus. Cuming.)

LEIOSTRACA BILINEATA. *Lei. testâ subulatâ, subfusiformi, pallidâ, fasciis linearibus duabus spiralibus in medio anfractuum cinctâ; anfractibus elongatis, in medio vix angulatis; aperturâ elongatâ, pyriformi.*

THE TWO-LINE LEIOSTRACA. Shell subulate, subfusiform, pale, girt with two linear spiral bands in the middle of the whorls; whorls long, very obscurely angular in the middle; aperture long, pyriform.

ALDER (*Eulima*), Mollusca of Northumberland and Durham.

Helix subulata, *var.*, Montagu.

Hab. British Islands.

Species 10. (Fig. *a*, *b*, Mus. Angas.)

LEIOSTRACA ACUTISSIMA. *Lei. testâ pellucidâ, albâ, tenuissimâ, subfusiformi, pyramidatâ, acuminatâ; anfractibus octo, subinflatis, ultimo magno; aperturâ angustâ, columellâ elongatâ, rectiusculâ.*

THE VERY ACUTE LEIOSTRACA. Shell pellucid, white, very thin, subfusiform, tapering, acuminated; whorls eight, slightly inflated, the last large; aperture narrow, columella long, rather straight.

SOWERBY.

Hab. Sydney Harbour, New South Wales; J. F. Angas.

A pretty little transparent white shell, resembling *L. subulata*, but more fusiform, and sharply acuminated.

Species 11. (Fig. *a*, *b*, Mus. Cuming.)

LEIOSTRACA ACICULATA. *Lei. testâ pyramidali, semipellucidâ, nitidissimâ, subsolidâ, pallidè fulvâ; anfractibus brevibus, rectis; aperturâ breviusculâ.*

THE ACICULATE LEIOSTRACA. Shell pyramidal, semipellucid, very shining, rather solid, pale-fawn; whorls short, straight; aperture rather short.

GOULD.

Hab. Feejee Islands.

A very shining pyramidal little species.

Species 12. (Mus. Cuming.)

LEIOSTRACA MINDOROENSIS. *Lei. testâ albidâ, tenui, brevi, ventricosâ; anfractibus paucis, inflatis, ultimo magno, ovali; aperturâ subovali, columellâ subtortuâ.*

THE MINDORO LEIOSTRACA. Shell whitish, thin, short, ventricose; whorls few, inflated, the last large, oval; aperture rather oval, columella slightly tortuous.

ADAMS AND REEVE (*Eulima*), Voy. Sam. Moll. p. 52. pl. 11. f. 25.

Hab. Island of Mindoro, Philippines.

Rather more ovate and ventricose than the greater part of the shells composing this genus.

13.a.

14.

15.

13.b.

16.

17.

18.

19.

20.

21.

Sowerby, del.et lith.

Vincent Brooks, Imp.

LEIOSTRACA.

PLATE III.

Species 13. (Fig. *a*, *b*, Mus. Cuming.)

LEIOSTRACA PYRAMIDALIS. *Lei. testâ breviusculâ, pyramidali, subpellucidâ, albidâ, in medio anfractuum pallidè fusco-purpurascente; anfractibus septem, curtis, rectis, ultimo subangulato; aperturâ ovali.*

THE PYRAMIDAL LEIOSTRACA. Shell rather short, pyramidal, subpellucid, whitish, pale purplish-brown in the middle of the whorls; whorls seven, short, straight, the last slightly angular; aperture oval.

SOWERBY.

Hab. ——?

This species rather resembles *Leiostraca aciculata*, but is shorter and more angular.

Species 14. (Mus. Cuming.)

LEIOSTRACA STENOSTOMA. *Lei. testâ tenui, semipellucidâ, subfusiformi; anfractibus vix inflatis, ultimo oblongo, in medio subangulato; aperturâ angustatâ, columellâ elongatâ, labro subangulato.*

THE NARROW-MOUTHED LEIOSTRACA. Shell thin, white, semipellucid, subfusiform; whorls extremely little inflated, the last oblong, subangulated in the middle; aperture narrow, columella long, outer lip angular.

JEFFREYS.

Hab. Norway.

Species 15. (Mus. Cuming.)

LEIOSTRACA DISTORTA. *Lei. testâ parvâ, albâ, pellucidâ, curtâ, medio subarcuatâ, depressâ, apice incurvo; anfractibus paucis; aperturâ subtrigonâ, infrâ subexpansâ.*

THE DISTORTED LEIOSTRACA. Shell small, white, pellucid, short, somewhat arched and depressed in the middle, apex bent forward; whorls few; aperture somewhat trigonal, rather expanded at the lower part.

PEASE.

Hab. Sandwich Islands.

The depression of the centre of the body-whorl, which is characteristic of several species of this genus, is in this case exaggerated, and extends to one or two whorls above, so that the apex is bent forward, as if some pressure had been placed on the centre of the shell when in a soft state.

Species 16. (Mus. Cuming.)

LEIOSTRACA NIVEA. *Lei. testâ curtâ, albâ, semipellucidâ, subpyramidatâ; anfractibus curtis, paulo inflatis, suturâ distinctâ; aperturâ ovali, columellâ subtortuâ, tenui, labro tennissimo.*

THE SNOWY LEIOSTRACA. Shell short, white, semipellucid, subpyramidal; whorls short, a little swelled, suture distinct; aperture oval, columella subtortuous, thin, outer lip very thin.

A ADAMS.

Hab. Japan.

Species 17. (Mus. Cuming.)

LEIOSTRACA PURA. *Lei. testâ pyramidali, albâ, pellucidâ; anfractibus numerosis, curtis, rectis; aperturâ angustâ, columellâ subtortuâ.*

THE PURE LEIOSTRACA. Shell pyramidal, white, pellucid; whorls numerous, short, straight; aperture narrow, columella rather tortuous.

A. ADAMS.

Hab. Japan.

A narrower shell than *Leiostraca nivea*, with the sides much more straight.

Species 18. (Mus. Cuming.)

LEIOSTRACA SUBVENTRICOSA. *Lei. testâ albâ, brevi, subsolidâ, subovali; anfractibus paucis, inflatis; aperturâ ovali, brevi, labro tenui.*

THE SUBVENTRICOSE LEIOSTRACA. Shell white, short, rather solid, rather oval; whorls few, inflated; aperture oval, short, outer lip thin.

SOWERBY.

Hab. ——?

Another species of the more oval form, and differing from *Leiostraca Mindoroensis* in the whorls being shorter and less inflated.

Species 19. (Mus. Cuming.)

LEIOSTRACA PAUXILLUS. *Lei. testâ parvâ, albâ, pellucidâ, pyramidali, apice acuto; anfractibus brevibus, rectiusculis; aperturâ curtâ, columellâ tortuâ, labro tenui, infrà subexpanso.*

THE SMALL LEIOSTRACA. Shell small, white, pellucid, pyramidal, apex acute; whorls short, rather straight, aperture short, columella tortuous, outer lip thin, slightly expanded beneath.

A. ADAMS.

Leiostraca clava, A. Adams.

Hab. Japan.

As compared with *Leiostraca pura* this shell has the apex more pointed, and the aperture more expanded at the base.

Species 20. (Mus. Cuming.)

LEIOSTRACA VINCTA. *Lei. testâ parvâ, subfusiformi, tenui, pallidâ, lineis rubris duabus prope medium anfractuum cinctâ; anfractibus subinflatis, ultimo ovali, apice acuto; aperturâ ovali.*

THE BOUND LEIOSTRACA. Shell small, subfusiform, thin, pale, girt with two red lines near the middle of the whorls; whorls slightly inflated, the last oval, open, apex acute; aperture oval.

Hab. —— ?

Species 21. (Mus. Cuming.)

LEIOSTRACA MARIÆ. *Lei. testâ albidâ, opacâ, subcylindricâ; anfractibus brevibus, rectiusculis, suturâ distinctâ, apice obtuso; aperturâ subovali, columellâ elongatâ, rectiusculâ.*

MARY'S LEIOSTRACA. Shell whitish, opake, subcylindrical; whorls short, rather straight, suture distinct, apex obtuse; aperture suboval, columella long, rather straight.

A. ADAMS.

Hab. Japan.

A very cylindrical species, with obtuse apex.

LEIOSTRACA.

	Plate.	Species.
acuta	II.	7
acutissima	II.	10
aciculata	II.	11
bivittata	I.	6
bilineata	II.	9
distorta	III.	15
fulvo-cincta	II.	8
Metcalfei	I.	5
Mindoroensis	II.	12
Mariæ	III.	21
nivea	III.	16
pyramidalis	III.	13
pura	III.	17
pauxillus	III.	19
recta	I.	3
subulata	I.	2
stenostoma	III.	14
subventricosa	III.	18
unilineata	I.	4
varians	I.	1
vincta	III.	20

MONOGRAPH

OF THE GENUS

N I S O.

"The Almighty Maker has throughout
Discriminated each from each by strokes
And touches of His hand."

Cowper.

1.

2.

3.

4.

5.

6.

7.

8.a.

8.b.

9.

NISO.

Genus NISO, *Risso*.

Testa subulata, pyramidalis, multispiralis, varicibus linearibus; axi perforato, aperturâ angulatâ; labro simplice, acuto; umbilico ad apicem extenso; operculo paucispirali.

Shell subulate, pyramidal, many-whorled, with linear varices; axis perforated, aperture angular; outer lip simple, acute; umbilicus reaching to the apex; operculum paucispiral.

The nine species composing this genus are distinguished from the shells of *Eulima* by the umbilical perforation of the axis and the acuminated lower termination of the aperture.

Species 1. (Mus. Cuming.)

NISO SANDVICHENSIS. *Nis. testâ parvâ, albâ, brevi, solidâ; anfractu ultimo lato, angulato; umbilico parvo, rotundo, aperturâ infrà acutissimâ.*

THE SANDWICH ISLAND NISO. Shell small, white, short, solid; the last whorl broad, angular; umbilicus small, round, aperture very acute at the base.

SOWERBY.

Hab. Sandwich Islands.

Species 2. (Mus. Cuming.)

NISO GONIOSTOMA. *Nis. testâ solidâ, pyramidali, oblongâ, pallidè fulvâ, latè fusco fasciatâ; anfractibus numerosis, brevibus; umbilico mediocri, aperturâ rhomboideâ.*

THE ANGLE-MOUTHED NISO. Shell solid, pyramidal, oblong, pale-fawn, with a wide brown band; whorls numerous, short; umbilicus middle-sized, aperture rhomboidal.

A. ADAMS, Sowerby's Thesaurus, Niso, sp. 6. pl. 170. f. 1.

Hab. Island of Bureas, Philippines; H. Cuming.

Species 3. (Mus. Cuming.)

NISO IMBRICATA. *Nis. testâ acuminatâ, pyramidali, albidâ, longitudinaliter rubro lineatâ; anfractibus medio subexcavatis, infrà angulatis, prominentibus; umbilico parvo, aperturâ anticè angulatâ.*

THE IMBRICATED NISO. Shell acuminated, pyramidal, whitish, longitudinally lineated with red; whorls excavated in the middle, angular and prominent beneath; umbilicus small, aperture angular in front.

SOWERBY, Eulima, Pro. Zool. Soc. 1834.

Hab. St. Elena; in sandy mud, from six to eight fathoms.

The whorls in this pretty little shell are elegantly tapering upwards, and swelled near the suture.

Species 4. (Mus. Cuming.)

NISO TEREBELLA. *Nis. testâ solidâ, fuscâ; anfractibus numerosis, brevibus, paulo convexis, ultimo subrotundo; umbilico carinato, aperturâ acuminatâ.*

THE LITTLE AUGER NISO. Shell solid, brown; whorls numerous, short, a little convex, the last rather round; umbilicus keeled, aperture acuminated.

CHEMNITZ, Turbo, Conch. 10. t. 165. f. 1592, 3.
Helix terebellata, Broch.

Hab. Nicobar Island.

Species 5. (Mus. Cuming.)

NISO MARMORATA. *Nis. testâ solidâ, ventricosâ, albidâ, brunneo marmoratâ; anfractibus convexiusculis, ultimo rotundo, aperturâ breviusculâ.*

THE MARBLED NISO. Shell solid, very ventricose, whitish, marbled with brown; whorls rather convex, the last rounded, umbilicus wide, aperture rather short.

SOWERBY (Eulima), Conchological Illustrations.

Hab. Philippine Islands; H. Cuming.

Species 6. (Mus. Cuming.)

NISO CANDIDULA. *Nis. testâ latè pyramidali, albâ, solidâ; anfractibus brevibus, convexiusculis, ultimo rotundo; umbilico mediocri, columellâ arcuatâ, acuminatâ.*

THE WHITE NISO. Shell widely pyramidal, white, solid;

whorls short, rather convex, the last round; umbilicus middle-sized, columella arched, acuminate.

A. ADAMS, Sowerby's Thesaurus, Niso, sp. 7. pl. 170. f. 4, 5.

Hab. Philippines; H. Cuming.

Species 7. (Mus. Cuming.)

NISO SPLENDIDULA. *Nis. testâ latè pyramidali, solidâ, albido-purpurascente, medio anfractuum interruptim fulvo fasciatâ, supra et infra suturam rubro marmoratâ; anfractibus, numerosis, rectis, suturâ et varicibus impressis rubro marginatis; umbilico magno, ad marginem marmorato.*

THE SPLENDID NISO. Shell widely pyramidal, solid, whitish-purple, interruptedly brown-banded in the middle of the whorls, marbled with red above and below the suture; whorls numerous, straight, the suture and varices impressed, edged with red; umbilicus large, marbled at the margin.

SOWERBY (Eulima), Pro. Zool. Soc. January, 1834.

Hab. St. Elena; H. Cuming.

An exquisitely beautiful shell.

Species 8. (Fig. *a*, *b*, Mus. Cuming.)

NISO INTERRUPTA. *Nis. testâ pyramidali, acuminatâ, nitente, albidâ, ad varices maculis linearibus brunneis truncatis pictâ; anfractibus numerosis, rectis, ultimo angulato, subcarinato; umbilico parvo.*

THE INTERRUPTED NISO. Shell pyramidal, acuminated, shining, whitish, painted with linear-brown truncated spots at the varices; whorls numerous, straight, the last angular, subcarinate; umbilicus small.

SOWERBY, Eulima, Pro. Zool. Soc. January, 1834; Conch. Illustr. f. 11.

Hab. Central America, dredged in coarse sand at 11 to 13 fathoms; H. Cuming.

Species 9. (Mus. Cuming.)

NISO BRUNNEA. *Nis. testâ brevinsculâ, solidâ, fuscâ; anfractibus convexis, ultimo angulato, subcarinato; umbilico parvo, aperturâ brevi.*

THE BROWN NISO. Shell rather short, solid, brown; whorls convex, the last angular, slightly keeled; umbilicus small, aperture short.

SOWERBY (Eulima), Pro. Zool. Soc. 1834; Conch. Illustr. f. 9.

Hab. Island of Hanau, China Seas.

MONOGRAPH

OF THE GENUS

POTAMIDES.

"What is His creation less
Than a capacious reservoir of means
Form'd for His use, and ready at His will?"

Cowper.

1.a.

2.a.

2.b.

1.b.

Sowerby, del et lith.

Vincent Brooks, Imp.

POTAMIDES.

Genus POTAMIDES, *Brongniart.*

Testa subfluviatilis, claviformis, pyramidalis, turrita; anfractibus numerosis, angulatis; aperturâ subquadratâ, canali brevi, labio interno medio arcuato, suprà incrassato et canaliculato, infrà in columellam latam incrassatam desinente; operculo corneo, multispirali.

Shell subfluviatile, club-shaped, pyramidal, turreted; whorls numerous, angular; aperture subquadrate, canal short, inner lip arched in the middle, thickened and canaliculated above, ending beneath in a broad thickened columella; operculum horny, multispiral.

But for the very distinct, broad canal in which the mouth terminates in the two species composing this genus, they might have been very well included in the genus *Lampania*.

Species 1. (Fig. *a*, *b*, Mus. Cuming.)

POTAMIDES PACIFICUS. *Pot. testâ pyramidali, fusco-nigrescente; anfractibus acutè elevatis, lævibus, ad angulum nodosis, ultimo prope latus subcarinato; aperturâ subquadratâ, labio interno calloso, columellâ tortuâ, labro angulato, sinuato, canali lato.*

THE PACIFIC POTAMIDES. Shell pyramidal, blackish-brown; whorls acutely elevated, smooth, nodose at the angle, the last slightly carinated at the side; aperture subquadrate, inner lip callous, columella tortuous, outer lip angular, sinuous, canal broad.

SOWERBY, Genera of Shells.

Hab. Tombey, Peru, on mud banks; H. Cuming.

Species 2. (Fig. *a*, *b*, Mus. Cuming.)

POTAMIDES EBENINUS. *Pot. testâ pyramidali, turritâ, fusco-nigrescenti, angulatâ, ad angulum nodosâ, spiraliter liratâ; anfractibus angulatis, ultimo ad latus univaricoso; aperturâ albâ, prope marginem fusco tinctâ, magnâ, versus spiram elevatâ, labro externo expanso, sinuato, labio interno foliaceo, medio arcuato, suprà et infrà incrassato, canali brevi, lato.*

THE EBONY POTAMIDES. Shell pyramidal, turreted, blackish-brown, angulated, nodose at the angle, spirally ridged; whorls angular, the last with a varix at the side; aperture white, tinged with brown near the margin, large, raised towards the spire, outer lip expanded, sinuous, inner lip foliated, arched in the centre, thickened above and beneath, canal short, wide.

BRUGUIÈRE, Dict., *Cerithium*, n. 26.

Hab. Australia.

This well-known shell is characterized by a remarkably expanded aperture.

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